CLAIMS

What is claimed is:

1. A multi-link reconfiguration method, wherein the method comprises:

generating, by a first multi-link device, MLD, a first frame, wherein the first frame is used to reconfigure a link between the first MLD and a second MLD; and

sending, by the first MLD, the first frame to the second MLD;

wherein the first frame comprises a first field; and wherein the first frame is used to reconfigure a link between the first MLD and a second MLD, comprises:

when a value of the first field is a first preset value, the first field indicates that the first frame is used to disconnect a target link from a link established between the first MLD and the second MLD, wherein the target link is a link on which the first frame is transmitted; and

when a value of the first field is a second preset value, the first field indicates that the first frame is used to disassociate the second MLD from the first MLD.

2. A multi-link reconfiguration method, wherein the method comprises:

receiving, by a second MLD, a first frame from a first MLD, wherein the first frame is used to reconfigure a link between the first MLD and the second MLD; and

parsing, by the second MLD, the first frame;

wherein the first frame comprises a first field; and wherein the first frame is used to reconfigure a link between the first MLD and a second MLD, comprises:

when a value of the first field is a first preset value, the first field indicates that the first frame is used to disconnect a target link from a link established between the first MLD and the second MLD, wherein the target link is a link on which the first frame is transmitted; and

when a value of the first field is a second preset value, the first field indicates that the first frame is used to disassociate the second MLD from the first MLD.

3. The method according to claim 1 or 2, wherein the first preset value is 1, and the second preset value is 0.

4. The method according to any one of claims 1 to 3, wherein the first frame is BSS transition management, BTM, request frame.

5. The method according to claims 1 to 4, wherein the method further comprises:

receiving a BTM response frame indicates whether a link transition between the first MLD

and the second MLD is accepted; or

sending a BTM response frame indicates whether a link transition between the first MLD and the second MLD is accepted.

6. The method according to claim 5, wherein the BTM response frame comprises target BSSID field, and the target BSSID field comprises MLD media access control, MAC, address of an AP MLD that the second MLD choose to establish a connection.

7. The method according to claim 5 or 6, wherein the BTM response frame comprises a neighbor report element, and the neighbor report element comprises a basic multi-link element, and the basic multi-link element doesn’t include a per-link profile.

8. The method according to claim 1, wherein the first frame comprises a multi-link element, and the multi-link element comprises a multi-link control field, and the multi-link control field comprises a type field, wherein a value of the type field is 2 indicating that the first frame is used to reconfigure a target link between the first MLD and the second MLD.

9. The method according to claim 8, wherein the first frame further comprises a second field, and the second field is used to indicate the target link.

10. The method according to claim 8 or 9, wherein the first frame further comprises a third field and a fourth field; wherein the third field is used to indicate a time at which the target link is to be removed, and the fourth field is used to indicate whether the third field is included in the first frame.

11. The method according to any one of claims 8 to 10, wherein the method further comprises:

receiving a second frame, and the second frame is used to indicate whether a reconfiguration between the first MLD and the second MLD is accepted; or

sending a second frame, and the second frame is used to indicate whether a reconfiguration between the first MLD and the second MLD is accepted.

12. The method according to any one of claims 8 to 11, wherein the first frame is a beacon frame.

13. An communication apparatus, comprising a processing module and a communication module, wherein

the processing module is configured to generate a first frame, wherein the first frame is used to reconfigure a link between a first MLD and a second MLD; and

the communication module is configured to send the first frame to the second MLD;

wherein the first frame comprises a first field; and wherein the first frame is used to reconfigure a link between the first MLD and a second MLD, comprises:

when a value of the first field is a first preset value, the first field indicates that the first frame is used to disconnect a target link from a link established between the first MLD and the second MLD, wherein the target link is a link on which the first frame is transmitted; and

when a value of the first field is a second preset value, the first field indicates that the first frame is used to disassociate the second MLD from the first MLD.

14. An communication apparatus, comprising a communication module and a processing module, wherein

the communication module is configured to receive a first frame from a first MLD, wherein the first frame is used to reconfigure a link between the first MLD and a second MLD; and

the processing module is configured to parse the first frame;wherein the first frame comprises a first field; and wherein the first frame is used to reconfigure a link between the first MLD and a second MLD, comprises:

when a value of the first field is a first preset value, the first field indicates that the first frame is used to disconnect a target link from a link established between the first MLD and the second MLD, wherein the target link is a link on which the first frame is transmitted; and

when a value of the first field is a second preset value, the first field indicates that the first frame is used to disassociate the second MLD from the first MLD.

15. The apparatus according to claim 13 or 14, wherein the first preset value is 1, and the second preset value is 0.

16. The apparatus according to any one of claims 13 to 15, wherein the first frame is BSS transition management, BTM, request frame.

17. The apparatus according to claim 16, wherein the communication module is configured to:

receive a BTM response frame, and the BTM response frame is used to indicate whether a link transition between the first MLD and the second MLD is accepted; or

send a BTM response frame, and the BTM response frame is used to indicate whether a link transition between the first MLD and the second MLD is accepted.

18. The apparatus according to claim 17, wherein the BTM response frame comprises target BSSID field, and the target BSSID field comprises MLD media access control, MAC, address of

an AP MLD that the second MLD choose to establish a connection.

19. The apparatus according to claim 17 or 18, wherein the BTM response frame comprises a neighbor report element, and the neighbor report element comprises a basic multi-link element, and the basic multi-link element doesn't include a per-link profile.

20. The apparatus according to claim 13, wherein the first frame comprises a multi-link element, and the multi-link element comprises a multi-link control field, and the multi-link control field comprises a type field, wherein a value of the type field is 2 indicating that the first frame is used to reconfigure a target link between the first MLD and the second MLD.

21. The apparatus according to claim 20, wherein the first frame further comprises a second field, and the second field is used to indicate the target link.

22. The apparatus according to claim 20 or 21, wherein the first frame further comprises a third field and a fourth field; wherein the third field is used to indicate a time at which the target link is to be removed, and the fourth field is used to indicate whether the third field is included in the first frame.

23. The apparatus according to any one of claims 20 to 22, wherein the first frame is a beacon frame.

24. An MLD, comprising a processor and a transceiver, wherein the processor is configured to perform a processing operation in the method according to any one of claims 1 to 12, and the transceiver is configured to perform a communication operation in the method according to any one of claims 1 to 12.

25. A computer-readable storage medium, wherein the computer-readable storage medium stores a computer program, the computer program comprises program instructions; and when the program instructions are executed by a computer, the computer is enabled to perform the method according to any one of claims 1 to 12.

26. A computer program product, wherein when the computer program product is run on a computer, the computer is enabled to perform the method according to any one of claims 1 to 12.

27. A chip, wherein the chip comprises a processing circuit and a transceiver pin, the processing circuit is configured to perform a processing operation in the method according to any one of claims 1 to 14, and the transceiver pin is configured to perform a communication operation in the method according to any one of claims 1 to 12.