

CLAIMS

What is claimed is:

1. A signaling information exchange method in a wireless local area network (WLAN), comprising:

5 generating, by a reporting access point (AP), a management frame, wherein the reporting AP belongs to a first AP multi-link device (MLD), the management frame comprises MLD information, the MLD information comprises a first MLD element indicating the first AP MLD, a second MLD element indicating another AP MLD different from the first AP MLD, and a multiple basic service set identifier, BSSID, element, wherein the multiple BSSID element comprises
10 information about another AP belonging to the same multiple BSSID set as the reporting AP; and
 sending, by the reporting access point, the management frame.

2. A signaling information exchange method in a wireless local area network (WLAN), comprising:

 receiving, by a station, a management frame from a reporting access point (AP), wherein the
15 reporting AP belongs to a first AP multilink device (MLD), the management frame comprises MLD information, the MLD information comprises a first MLD element indicating the first AP MLD, a second MLD element indicating another AP MLD different from the first AP MLD, and a multiple basic service set identifier, BSSID, element, wherein the multiple BSSID element comprises information about another AP belonging to the same multiple BSSID set as the reporting
20 AP; and

 obtaining, by the station based on the management frame, the information about the another AP in the first MLD.

3. The method according to claim 1 or 2, wherein the first MLD element comprises a common control field, and

25 the common control field comprises type information that indicates an MLD element type of the first MLD element.

4. The method according to claim 3, wherein the first MLD element is a formal MLD element, and the type information in the first MLD element indicates that the first MLD element is the formal MLD element.

30 5. The method according to claim 1, wherein the second MLD element comprises a common

control field, and

the common control field comprises type information indicating that the second MLD element is a virtual MLD element.

5 6. The method according to any one of claims 1 to 5, wherein the management frame further comprises: reduced neighbor report (RNR) element.

7. The method according to claim 9, wherein in the RNR element, MLD identifiers of a plurality of reported APs are the same when the plurality of reported APs are from the same MLD.

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10 8. The method according to any one of claims 1 to 7, wherein the management frame is a beacon frame, an association response frame, a probe response frame, an authentication frame, or a neighbor report.

9. An access point (AP), comprising a processor and a memory, wherein the memory is
15 configured to store instructions, and when the instructions are run by the processor, the AP is enabled to perform the method according to any one of claims 1 and 3 to 8.

10. A station, comprising a processor and a memory, wherein the memory is configured to store instructions, and when the instructions are run by the processor, the station is enabled to perform the method according to any one of claims 2 to 8.

20 11. A chip, comprising an input/output interface circuit and a processing circuit, wherein the input/output interface circuit is configured to input/output data or signaling information, and the processing circuit is configured to process the data or signaling information provided by the input/output interface circuit, to enable a device comprising the chip to perform the method according to any one of claims 1 to 8.

25 12. A computer-readable storage medium, wherein the computer-readable storage medium stores computer program code or instructions, and when the computer program or the instructions is/are run on a processor, a device comprising the processor is enabled to perform the method according to any one of claims 1 to 8.

30 13. A computer program product, wherein the program product stores a computer program or instructions, and when the computer program or the instructions is/are run on a processor, a device comprising the processor is enabled to perform the method according to any one of claims 1 to 8.

14. A communication system, wherein the communication system comprises an access point according to claim 9 and a station according to claim 10.