CLAIMS

What is claimed is:

1. A station in a wireless local area network WLAN, comprising:

a processor, configured to generate a probe request frame, wherein the probe request frame is used to request a second access point, AP, to feed back a communication parameter that is of an AP multi-link device, MLD, and that is related to the second AP, wherein the communication parameter requested by the probe request comprises: a communication parameter of an AP MLD in which another AP belonging to a same multiple basic service set identifier, MBSSID, set as the second AP is located, the second AP is a transmitted basic service set identifier, transmitted BSSID, AP, and the communication parameter of the AP MLD is communication parameters of a plurality of links supported by the AP MLD, wherein the probe request frame carries, for each AP of the AP MLD, an identifier list of an information element, to request content of an information element of each AP in the AP MLD, wherein the information element is partial information of the communication parameter of the AP in the AP MLD; and

a transceiver, configured to send the probe request frame to the second AP.

2. A requesting method for probing an access point multi-link device, wherein the method is executed by a station in a wireless local area network WLAN, and the method comprises:

generating a probe request frame, wherein the probe request frame is used to request a second AP to feed back a communication parameter that is of an AP MLD and that is related to the second AP, wherein the communication parameter requested by the probe request comprises: a communication parameter of an AP MLD in which another AP belonging to a same multiple basic service set identifier, MBSSID, set as the second AP is located, the second AP is a transmitted basic service set identifier, transmitted BSSID AP, and the communication parameter of the AP MLD is communication parameters of a plurality of links supported by the AP MLD, wherein the probe request frame carries, for each AP of the AP MLD, an identifier list of an information element, to request content of an information element of each AP in the AP MLD, wherein the information element is partial information of the communication parameter of the AP in the AP MLD; and

sending the probe request frame to the second AP.

3. The station according to claim 1 or the method according to claim 2, wherein the probe

request frame carries second indication information, and the second indication information indicates the second AP to feed back the communication parameter that is of the AP MLD and that is related to the second AP.

4. The station or method according to claim 3, wherein the second indication information is carried in the probe request frame, the second indication information indicates an MLD identifier or an MLD address, and the MLD identifier or the MLD address indicates the second AP to feed back a communication parameter of an AP MLD corresponding to the MLD identifier or the MLD address.

5. The station or method according to any one of claims 1 to 4, wherein the probe request frame carries an identifier list of an information element, to request to acquire partial information elements of the AP in the AP MLD.

6. The station or method according to claim 5, wherein the probe response frame comprises communication parameters of a plurality of APs in the AP MLD, and the communication parameter of each AP in the plurality of APs comprises content of an information element corresponding to the identifier list of the information element carried in the probe request frame.

7. The station according to claim 1 or the method according to claim 2, wherein the probe response frame comprises an information element of a communication parameter corresponding to each AP.

8. The station according to claim 1 or the method according to claim 5, wherein the identifier list of the information element is carried in a multi-link element of the probe request frame.

9. A non-access point station (non-AP STA) multi-link device (MLD), comprising a station (STA) according to any one of claims 1 and 3 to 8.

10. A station in a non-AP MLD in a wireless local area network WLAN, comprising:

a processor, configured to generate the probe request frame, wherein the probe request frame is used to request a second AP to feed back a communication parameter that is of an AP MLD and that is related to the second AP, wherein the communication parameter requested by the probe request comprises: a communication parameter of an AP MLD in which another AP belonging to a same multiple basic service set identifier, MBSSID, set as the second AP is located, the second AP is a transmitted basic service set identifier, transmitted BSSID, AP, and the communication parameter of the AP MLD is communication parameters of a plurality of links supported by the AP MLD, wherein the probe request frame carries an identifier list of an information element, to

request to acquire corresponding information element of the AP in the AP MLD, wherein the information element is partial information of the communication parameter of the AP in the AP MLD; and

a transceiver, configured to send the probe request frame to the second AP.

11. A requesting method for probing an access point multi-link device, wherein the method is executed by a station in a non-AP MLD in a wireless local area network, WLAN, and the method comprises:

generating a probe request frame, wherein the probe request frame is used to request a second AP to feed back a communication parameter of an AP MLD, and that is related to the second AP, wherein the communication parameter requested by the probe request comprises: a communication parameter of an AP MLD in which another AP belonging to a same multiple basic service set identifier, MBSSID, set as the second AP is located, the second AP is a transmitted basic service set identifier, transmitted BSSID, AP, and the communication parameter of the AP MLD is communication parameters of a plurality of links supported by the AP MLD, wherein the probe request frame carries an identifier list of an information element, to request to acquire corresponding information element of the AP in the AP MLD, wherein the information element is partial information of the communication parameter of the AP in the AP MLD; and

sending the probe request frame to the second AP.

12. The station according to claim 10 or the method according to claim 11, wherein the probe request frame carries second indication information, and the second indication information indicates the second AP to feed back the communication parameter that is of the AP MLD and that is related to the second AP.

13. The station or method according to claim 12, wherein the second indication information is carried in the probe request frame, the second indication information indicates an MLD identifier or an MLD address, and the MLD identifier or the MLD address indicates the second AP to feed back a communication parameter of an AP MLD corresponding to the MLD identifier or the MLD address.

14. The station according to claim 10 or the method according to claim 11, wherein the station receives a probe response frame, wherein the probe response frame comprises communication parameters of a plurality of APs in the AP MLD, and the communication parameter of each AP in the plurality of APs comprises content of an information element corresponding to the identifier

list of the information element carried in the probe request frame.

15. The station or method according to any one of claims 10 to 14, wherein the probe request frame carries, for each AP of the AP MLD, an identifier list of an information element, to request content of an information element of each AP in the AP MLD.

16. The station or method according to claim 15, wherein the station receives a probe response frame, wherein the probe response frame comprises an information element of a communication parameter corresponding to each AP.

17. The station according to claim 10 or the method according to claim 15, wherein the identifier list of the information element is carried in a multi-link element of the probe request frame.

18. A non-access point station (non-AP STA) multi-link device (MLD), comprising a station (STA) according to any one of claims 10 and 12 to 17.