

CLAIMS

What is claimed is:

1. An interface parameter update method, comprising:

updating, by a multi-link (ML) device based on enabling or disabling of one or more of a plurality of network interfaces comprised in the ML device, parameters of enabled network interfaces in the plurality of network interfaces;

wherein the parameters comprise at least one of capability information or an operation parameter, the plurality of network interfaces work on different frequency bands, and the plurality of network interfaces share antennas configured in the ML device; and

wherein a status of a network interface in the plurality of network interfaces changes from a disabled state to an enabled state when the network interface is being enabled, and a status of a network interface in the plurality of network interfaces changes from an enabled state to a disabled state when the network interface is being disabled.

2. The method according to claim 1, wherein the updating, by the multi-link ML device based on enabling or disabling of one or more of the plurality of network interfaces comprised in the multi-link ML device, parameters of enabled network interfaces in the plurality of network interfaces comprises:

after enabling or disabling one of the plurality of network interfaces, configuring, by the ML device, parameters of each of all the enabled network interfaces in the plurality of network interfaces, and sending the parameters of all the enabled network interfaces through each of the enabled network interfaces.

3. The method according to claim 1 or 2, wherein the parameters comprise at least one of a configured quantity of transmit and receive antennas, a maximum supported quantity of to-be-sent or to-be-received streams, a parameter that indicates whether simultaneous sending and receiving with another network interface is supported, a highest modulation and coding scheme that is allowed to be used by devices at two ends of a link when adjacent channel interference exists on the link, a security margin that needs to be reserved at a transmit end of the link, channel bandwidth, or transmit power.

4. The method according to any one of claims 1 to 3, wherein the updating of parameters of the enabled network interfaces in the plurality of network interfaces comprises configuring each

of the enabled network interfaces so that the antennas configured in the ML device are shared among the enabled network interfaces in the plurality of network interfaces, but not shared by any disabled network interface in the plurality of network interfaces.

5 5. The method according to any one of claims 1 to 4, wherein the updating of parameters of the enabled network interfaces in the plurality of network interfaces comprises configuring each of the enabled network interfaces with Media Access Control (MAC), MAC layer management entity (MLME), station management entity (SME), and one or more physical layer (PHY) receive/transmit chains.

10 6. The method according to claim 5, wherein each of the one or more PHY receive/transmit chains includes analog and radio frequency (RF) and an antenna.

7. The method according to claim 6, wherein each of the one or more PHY receive/transmit chains further includes a scrambler, a forward error correction (FEC) coder, a stream parser, an inter-leaver, a constellation mapper, a cyclic shift diversity (CSD), a spatial mapper, inverse discrete Fourier transform (IDFT), and guard interval (GI) and window insertion.

15 8. A multi-link (ML) device, wherein the ML device comprises a module configured to implement the method according to any one of claims 1 to 7.

20 9. A multi-link (ML) device, wherein the ML device comprises a memory and a processor, the memory stores a program used to perform the method according to any one of claims 1 to 7, and the processor invokes the program stored in the memory to perform the method according to any one of claims 1 to 7.

10. A computer-readable storage medium, wherein the computer-readable storage medium stores instructions; and when the instructions are run on a computer, the computer is enabled to perform the method according to any one of claims 1 to 7.

25 11. A computer program product comprising instructions, wherein when the computer program product runs on a computer, the computer is enabled to perform the method according to any one of claims 1 to 7.

30 12. A chip, wherein the chip comprises a processing circuit and an interface circuit, the interface circuit is configured to receive instructions and transmit the instructions to the processing circuit, and the processing circuit is configured to perform the method according to any one of claims 1 to 7.