

CLAIMS

WHAT IS CLAIMED IS:

1. A communication method, performed by a communication device supporting multiple links, comprising:

determining a first message frame, wherein the first message frame comprises information regarding multiple user multiple input multiple output (MU-MIMO), and the information regarding MU-MIMO is configured to identify a support status of the communication device for at least one of a single-type resource unit or a composite resource unit; and

sending the first message frame,

wherein the composite resource unit comprises at least one of:

52+26-tone or 106+26-tone.

2. The communication method according to claim 1, wherein the information regarding MU-MIMO comprises: partial bandwidth downlink MU-MIMO information,

wherein the communication device is a station supporting multiple links, and the partial bandwidth downlink MU-MIMO information is configured to identify that the station is capable to support downlink communication using at least one of the single-type resource unit or the composite resource unit on a supported bandwidth.

3. The communication method according to claim 2, further comprising:

receiving a protocol data unit (PPDU) using at least one of the single-type resource unit or the composite resource unit,

wherein a signaling field of the PPDU comprises: an identifier bit of the station and a sequence number of at least one of the single-type resource unit or the composite resource unit.

4. The communication method according to claim 1, wherein the information regarding MU-MIMO comprises: partial bandwidth uplink MU-MIMO information, and the partial bandwidth uplink MU-MIMO information is configured to identify that the communication device supports uplink communication using at least one of the single-type resource unit or the composite resource unit.

5. The communication method according to claim 4, wherein the communication device

is a station supporting multiple links, and the partial bandwidth uplink MU-MIMO information is configured to identify that the station supports sending of a trigger-based MU-MIMO transmission using at least one of the single-type resource unit or the composite resource unit.

6. The communication method according to claim 4, wherein the communication device is an access point supporting multiple links, and the partial bandwidth uplink MU-MIMO information is configured to identify that the access point supports reception of a trigger-based MU-MIMO transmission using at least one of the single-type resource unit or the composite resource unit.

7. A communication method, comprising:

receiving a first message frame from a communication device supporting multiple links, wherein the first message frame comprises information regarding multiple user multiple input multiple output (MU-MIMO), and the information regarding MU-MIMO is configured to identify a support status of the communication device for at least one of a single-type resource unit or a composite resource unit; and

performing a communication operation based on the first message frame,

wherein the composite resource unit comprises at least one of:

52+26-tone or 106+26-tone.

8. The communication method according to claim 7, wherein the information regarding MU-MIMO comprises: partial bandwidth downlink MU-MIMO information,

wherein the communication device is a station supporting multiple links, and the partial bandwidth downlink MU-MIMO information is configured to identify that the station is capable to support downlink communication using at least one of the single-type resource unit or the composite resource unit on a supported bandwidth.

9. The communication method according to claim 8, further comprising:

receiving a protocol data unit (PPDU) using at least one of the single-type resource unit or the composite resource unit,

wherein a signaling field of the PPDU comprises: an identifier bit of the station and a sequence number of at least one of the single-type resource unit or the composite resource unit.

10. The communication method according to claim 7, wherein the information regarding MU-MIMO comprises: partial bandwidth uplink MU-MIMO information, and the partial bandwidth uplink MU-MIMO information is configured to identify that the communication device supports uplink communication using at least one of the single-type resource unit or the composite resource unit.

11. The communication method according to claim 10, wherein the communication device is a station supporting multiple links, and the partial bandwidth uplink MU-MIMO information is configured to identify that the station is capable to support sending of a trigger-based MU-MIMO transmission using at least one of the single-type resource unit or the composite resource unit.

12. The communication method according to claim 10, wherein the communication device is an access point supporting multiple links, and the partial bandwidth uplink MU-MIMO information is configured to identify that the access point supports receiving of a trigger-based MU-MIMO transmission using at least one of the single-type resource unit or the composite resource unit.

13. A communication device on multiple links, performed by a communication device supporting multiple links, comprising:

a processing module, configured to determine a first message frame, wherein the first message frame comprises information regarding multiple user multiple input multiple output (MU-MIMO), and the information regarding MU-MIMO is configured to identify a support status of at least one of the communication device for a single-type resource unit or a composite resource unit;

a transceiver module, configured to send the first message frame,

wherein the composite resource unit comprises at least one of:

52+26-tone or 106+26-tone.

14. A communication device on multiple connections, comprising:

a transceiver module, configured to receive a first message frame from a communication device supporting multiple links, wherein the first message frame comprises information regarding multiple user multiple input multiple output (MU-MIMO), and the information regarding MU-MIMO is configured to identify a support status of the communication device

for at least one of a single-type resource units or a composite resource unit; and

a processing module, configured to control the transceiver module to perform a communication operation based on the first message frame,

wherein the composite resource unit comprises at least one of:

52+26-tone or 106+26-tone.

15. A communication device, comprising:

a processor; and

a memory storing a computer program executable by the processor, wherein, when the processor executes the computer program, the method according to any one of claims 1 to 6 or any one of claims 7 to 12.

16. A non-transitory computer-readable storage medium having stored thereon a computer program that, when executed by a processor, the method according to any one of claims 1 to 6 or any one of claims 7 to 12 is implemented.