

WHAT IS CLAIMED IS:

1. A communication method, performed by an access point, the method comprising:
determining a first message frame, wherein the first message frame comprises
information for indicating a resource unit, the resource unit is a single-type resource unit
or a multi-resource unit, and the resource unit is used by a station for uplink transmission;
and

sending the first message frame.

2. The method of claim 1, wherein the multi-resource unit consists of single-type
resource units.

3. The method of claim 1 or 2, wherein the multi-resource unit at least comprises: a
first single-type resource unit and a second single-type resource unit, and

the first single-type resource unit has a different number of subcarriers than the
second single-type resource unit.

4. The method of claim 1, wherein the first message frame comprises: a resource unit
allocation subfield,

and the communication method further comprises: setting the resource unit
allocation subfield to a first value for indicating an index of the resource unit.

5. The method of claim 4, wherein the resource unit is the single-type resource unit,
in response to the first value being a value within a first range of values; or

wherein the resource unit is the multi-resource unit, in response to the first value
being a value different from values within a first range of values.

~~6. The method of claim 4, wherein the resource unit is the multi-resource unit, in
response to the first value being a value different from values within a first range of values.~~

~~76.~~ The method of any one of claims 1 to ~~65~~, wherein the first message frame further
comprises: a first identifier indicating that the multi-resource unit has been assigned.

~~87.~~ The method of any one of claims 1 to ~~65~~, wherein the first message frame further
comprises: a second identifier indicating a bandwidth corresponding to the multi-resource
unit and a third identifier indicating a frequency band corresponding to the multi-resource
unit.

98. The method of claim 87, further comprising at least one of:

setting the second identifier to a second value corresponding to a bandwidth of 160 MHz, and setting the third identifier to a third value corresponding to a lower frequency band indicating lower 160 MHz bandwidth; or

setting the second identifier to a second value corresponding to a bandwidth of 160 MHz, and setting the third identifier to a fourth value corresponding to a higher frequency band indicating higher 160 MHz bandwidth.

~~10. The method of claim 8, further comprising:~~

~~setting the second identifier to a second value corresponding to a bandwidth of 160 MHz, and setting the third identifier to a fourth value corresponding to a higher frequency band indicating higher 160 MHz bandwidth.~~

119. The method of any one of claims 1 to ~~10~~8, wherein the multi-resource unit is assigned in one of: a bandwidth less than or equal to 160 MHz or a bandwidth of 160+160 MHz or 320 MHz.

~~12. The method of any one of claims 1 to 10, wherein the multi-resource unit is assigned in a bandwidth of 160+160 MHz or 320 MHz.~~

~~13~~10. A communication method, performed by a station, the method comprising:

receiving a first message frame, wherein the first message frame comprises information for indicating a resource unit, and the resource unit is a single-type resource unit or a multi-resource unit; and

performing uplink transmission using the resource unit.

1411. The method of claim ~~13~~10, wherein the multi-resource unit consists of single-type resource units.

1512. The method of claim ~~13-10~~ or 1411, wherein the multi-resource unit at least comprises: a first single-type resource unit and a second single-type resource unit, and

the first single-type resource unit has a different number of subcarriers than the second single-type resource unit.

1613. The method of claim ~~13~~10, wherein the first message frame comprises: a resource unit allocation subfield,

and the communication method further comprises: determining the resource unit for uplink transmission based on a value of the resource unit allocation subfield.

~~14~~14. The method of claim ~~16~~13, further comprising: performing uplink transmission using the single-type resource unit, in response to the resource unit allocation subfield being set to a value within a first range of values; or performing uplink transmission using the multi-resource unit, in response to the resource unit allocation subfield being set to a value different from values within a first range of values.

~~18. The method of claim 16, further comprising: performing uplink transmission using the multi-resource unit, in response to the resource unit allocation subfield being set to a value different from values within a first range of values.~~

~~15~~15. The method of any one of claims ~~13-10~~13-10 to ~~18~~14, wherein the first message frame further comprises: a first identifier indicating that the multi-resource unit has been assigned.

~~20~~16. The method of any one of claims ~~13-10~~13-10 to ~~18~~14, wherein the first message frame further comprises: a second identifier indicating a bandwidth corresponding to the multi-resource unit and a third identifier indicating a frequency band corresponding to the multi-resource unit.

~~21~~17. The method of claim ~~20~~16, further comprising at least one of:
performing uplink transmission using the multi-resource unit in a lower 160 MHz bandwidth, in response to the second identifier being set to a second value corresponding to a bandwidth of 160 MHz and the third identifier being set to a third value corresponding to a lower frequency band; or

performing uplink transmission using the multi-resource unit in a higher 160 MHz bandwidth, in response to the second identifier being set to a second value corresponding to a bandwidth of 160 MHz and the third identifier being set to a fourth value corresponding to a higher frequency band.

~~22. The method of claim 20, further comprising: performing uplink transmission using the multi-resource unit in a higher 160 MHz bandwidth, in response to the second identifier being set to a second value corresponding to a bandwidth of 160 MHz and the~~

third identifier being set to a fourth value corresponding to a higher frequency band.

~~2318.~~ The method of any one of claims ~~13-10~~ to ~~2217~~, wherein the multi-resource unit is assigned in one of: a bandwidth less than or equal to 160 MHz or a bandwidth of 160+160 MHz or 320 MHz.

~~24.~~ The method of any one of claims 13 to 22, wherein the multi-resource unit is assigned in a bandwidth of ~~160+160 MHz or 320 MHz.~~

~~25.~~ A communication device, applied to an access point, the communication device comprising:

~~a process module, configured to determine a first message frame, the first message frame comprises information for indicating a resource unit, wherein the resource unit is a single-type resource unit or a multi-resource unit, and the resource unit is used by a station for uplink transmission; and~~

~~a communication module, configured to send the first message frame.~~

~~26.~~ A communication device, applied to a station, the communication device comprising:

~~a receiving module, configured to receive a first message frame, the first message frame comprises information for indicating a resource unit, and the resource unit is a single-type resource unit or a multi-resource unit; and~~

~~a sending module, configured to perform uplink transmission using the resource unit.~~

~~2719.~~ An electronic device comprising: a memory, a processor and a computer program stored on the memory and executable by the processor, wherein when the computer program is executed by the processor, the method of any one of claims 1 to ~~129~~ 9 or the method of any one of claims ~~13-10~~ to ~~2418~~ is implemented.

~~2820.~~ A non-transitory computer readable storage medium, having a computer program stored thereon, wherein when the computer program is executed by a processor, the method of any one of claims 1 to ~~129~~ or the method of any one of claims ~~1310~~ to ~~2418~~ is implemented.