

CLAIMS

1. A resource allocation method, comprising:

receiving, by a station, a trigger frame from an access point, wherein

~~the trigger frame comprises a plurality of user information fields comprising association~~
5 ~~identifiers that are same as an association identifier of the station, and each user information field~~
~~indicates one or more resource units allocated to the station; or the trigger frame comprises one~~
user information field comprising an association identifier that is same as an association identifier
of the station, and the one user information field indicates a plurality of resource units allocated to
the station; and

10 determining, by the station, the plurality of allocated resource units based on the trigger frame.

2. The method according to claim 1, wherein the determining, by the station, the plurality of
allocated resource units based on the trigger frame comprises:

selecting, by the station from the trigger frame, one user information field ~~or more user~~
15 ~~information fields~~ that are the same as the association identifier of the station; and

for ~~each of the selected one or more user information fields~~, determining, by the station, ~~one~~
20 ~~or more~~ than one resource units indicated by the user information field, wherein

~~the one or more~~ than one resource units indicated by ~~each of the selected one or more user~~
information fields are the plurality of resource units allocated to the station.

~~3. The method according to claim 2, wherein the selecting, by the station from the trigger~~
20 ~~frame, one or more user information fields that are the same as the association identifier of the~~
~~station comprises:~~

~~separately parsing, by the station, an association identifier indicated by an association~~
identifier field in each of all the user information fields in the trigger frame; and

~~selecting, from all the parsed user information fields, one or more user information domains~~
25 ~~that are the same as the association identifier of the station.~~

~~4. The method according to claim 2, wherein the selecting, by the station from the trigger~~
frame, ~~one or more user information fields that are the same as the association identifier of the~~
station comprises:

~~parsing, by the station based on an index of each user information field in the trigger frame,~~

~~whether an association identifier indicated by an association identifier field in each user information field is the same as the association identifier of the station, and stopping performing the step of parsing whether an association identifier indicated by an association identifier field in each user information field is the same as the association identifier of the station, until a quantity of user information fields that are the same as the association identifier of the station is equal to N; and~~

~~selecting, from all the parsed user information fields, N user information fields that are the same as the association identifier of the station, wherein N is configured for the station in a protocol predefined manner or by using signaling.~~

5. ~~The method according to claim 2, wherein the selecting, by the station from the trigger frame, one or more user information fields that are the same as the association identifier of the station comprises:~~

~~parsing, by the station based on an index of each user information field in the trigger frame, whether an association identifier indicated by an association identifier field in each user information field is the same as the association identifier of the station, and stopping performing the step of parsing whether an association identifier indicated by an association identifier field in each user information field is the same as the association identifier of the station, until an end flag in a parsed user information field indicates that allocation of the resource unit to the station ends; and~~

~~selecting, from all the parsed user information fields, one or more user information fields that are the same as the association identifier of the station.~~

6. ~~The method according to claim 2, wherein the selecting, by the station from the trigger frame, one or more user information fields that are the same as the association identifier of the station comprises:~~

~~parsing, by the station based on an index of each user information field and starting from a first user information field, in the trigger frame, that is the same as the association identifier of the station, whether an association identifier indicated by an association identifier field in each user information field is the same as the association identifier of the station, until a user information field different from the association identifier of the station is parsed; and~~

~~selecting, from all the parsed user information fields, one or more user information fields that are the same as the association identifier of the station.~~

7. The method according to any one of claims 2 to 6, wherein the user information field comprises a resource unit indication; and

the determining, by the station, a plurality of resource units indicated by the user information field comprises:

determining, by the station, the plurality of resource units indicated by the resource unit indication in the user information field.

83. The method according to any one of claims 2 to 6 claim 2, wherein the user information field comprises a frequency band range indication and a resource unit indication, the frequency band range indication indicates an 80 MHz frequency band range in a bandwidth, and the resource unit indication indicates ~~one or more~~ than one resource units; and

the determining, by the station, ~~one or more~~ than one resource units indicated by the user information field comprises:

determining, by the station based on the frequency band range indicated by the frequency band range indication, ~~the one or the more~~ than one resource units indicated by the resource unit indication.

9. The method according to any one of claims 2 to 5, wherein the user information field comprises a frequency band range indication, a resource unit indication, and a resource unit combination indication;

the frequency band range indication indicates an 80 MHz frequency band range in a bandwidth;

the resource unit indication indicates one resource unit in the frequency band range; and

the resource unit combination indication indicates a combination of a plurality of resource units, and the combination of the plurality of resource units comprises the resource unit indicated by the resource unit indication.

10. The method according to claim 9, wherein the determining, by the station, a plurality of resource units indicated by the user information field comprises:

determining, by the station based on the resource unit combination indication and the resource unit indicated by the resource unit indication, the combination of the plurality of resource units as the plurality of resource units indicated by the user information field.

114. The method according to any one of claims 8 to 10 claim 3, wherein the frequency band range indicated by the frequency band range indication is any one of the following:

a primary 80 MHz frequency band range, a secondary 80 MHz frequency band range, a third 80 MHz frequency band range, and a fourth 80 MHz frequency band range.

~~12. The method according to any one of claims 8 to 11, wherein the one resource unit indicated by the resource unit indication is any one of the following resource units:~~

~~any seventh resource unit, wherein the seventh resource unit is a resource unit comprising 2 x 996 subcarriers;~~

~~any sixth resource unit in the frequency band range indicated by the frequency band range indication, wherein the sixth resource unit is a resource unit comprising 52 subcarriers;~~

~~any fifth resource unit in the frequency band range indicated by the frequency band range indication, wherein the fifth resource unit is a resource unit comprising 26 subcarriers;~~

~~any fourth resource unit in the frequency band range indicated by the frequency band range indication, wherein the fourth resource unit is a resource unit comprising 106 subcarriers;~~

~~any third resource unit in the frequency band range indicated by the frequency band range indication, wherein the third resource unit is a resource unit comprising 242 subcarriers;~~

~~any second resource unit in the frequency band range indicated by the frequency band range indication, wherein the second resource unit is a resource unit comprising 484 subcarriers; and~~

~~any first resource unit in the frequency band range indicated by the frequency band range indication, wherein the first resource unit is a resource unit comprising 996 subcarriers.~~

~~135. The method according to either of claims 8 and 9~~claim 3, wherein the plurality of resource units indicated by the resource unit indication are a plurality of resource units corresponding to any one of the following combinations:

~~a combination of two first resource units, wherein the first resource unit is a resource unit comprising 996 subcarriers;~~

~~a combination of four first resource units;~~

a combination of a fourth resource unit at a lowest frequency in one 20 MHz frequency band range in the 80 MHz frequency band range indicated by the frequency band range indication and a fifth resource unit in a center of the 20 MHz frequency band range;

a combination of a fourth resource unit at a highest frequency in one 20 MHz frequency band range in the 80 MHz frequency band range and a fifth resource unit in a center of the 20 MHz frequency band range;

wherein the fifth resource unit is a resource unit comprising 26 subcarriers, the fourth resource

unit is a resource unit comprising 106 subcarriers.

6. The method according to claim 3, wherein the plurality of resource units indicated by the resource unit indication are a plurality of resource units corresponding to any one of the following combinations:

5 a combination of a sixth resource unit at a second lowest frequency in one 20 MHz frequency band range in the 80 MHz frequency band range and a fifth resource unit in the 20 MHz frequency band range, wherein the fifth resource unit is on a same side as the sixth resource unit and is adjacent to the sixth resource unit;

10 a combination of a sixth resource unit at a second lowest frequency in one 20 MHz frequency band range in the 80 MHz frequency band range and a fifth resource unit in a center of the 20 MHz frequency band range;

a combination of a sixth resource unit at a second highest frequency in one 20 MHz frequency band range in the 80 MHz frequency band range and a fifth resource unit in the 20 MHz frequency band range, wherein the fifth resource unit is on a same side as the sixth resource unit and is
15 adjacent to the sixth resource unit;

a combination of a sixth resource unit at a second highest frequency in one 20 MHz frequency band range in the 80 MHz frequency band range and a fifth resource unit in a center of the 20 MHz frequency band range;

wherein the sixth resource unit is a resource unit comprising 52 subcarriers, the fifth resource unit is a resource unit comprising 26 subcarriers.

7. The method according to claim 3, wherein the plurality of resource units indicated by the resource unit indication are a plurality of resource units corresponding to any one of the following combinations:

25 a combination of a second resource unit and a third resource unit in the 80 MHz frequency band range, wherein the third resource unit is adjacent to the second resource unit;

a combination of a second resource unit and a third resource unit in the 80 MHz frequency band range, wherein the third resource unit is not adjacent to the second resource unit;

wherein the third resource unit is a resource unit comprising 242 subcarriers, the second resource unit is a resource unit comprising 484 subcarriers.

30 ~~a combination of two third resource units on two sides of the frequency band range;~~

8. The method according to claim 3, wherein the plurality of resource units indicated by the

resource unit indication are a plurality of resource units corresponding to any one of the following combinations:

a combination of a first resource unit corresponding to the 80 MHz frequency band range and a second resource unit that is in a lower-frequency 80 MHz frequency band range and that is not adjacent to the first resource unit, wherein the 80 MHz frequency band range indicated by the frequency band range indication is adjacent to the lower-frequency 80 MHz frequency band range;

a combination of a first resource unit corresponding to the 80 MHz frequency band range and a second resource unit that is in a higher-frequency 80 MHz frequency band range and that is not adjacent to the first resource unit, wherein the 80 MHz frequency band range indicated by the frequency band range indication is adjacent to the higher-frequency 80 MHz frequency band range;

wherein the first resource unit is a resource unit comprising 996 subcarriers, the second resource unit is a resource unit comprising 484 subcarriers.

9. The method according to claim 3, wherein the plurality of resource units indicated by the resource unit indication are a plurality of resource units corresponding to any one of the following combinations:

a combination of a first resource unit corresponding to the 80 MHz frequency band range and a second resource unit and a third resource unit that are in a lower-frequency 80 MHz frequency band range and that are adjacent to the first resource unit, wherein the 80 MHz frequency band range indicated by the frequency band range indication is adjacent to the lower-frequency 80 MHz frequency band range;

a combination of a first resource unit corresponding to the 80 MHz frequency band range and a second resource unit and a third resource unit that are in a higher-frequency 80 MHz frequency band range and that are adjacent to the first resource unit, wherein the 80 MHz frequency band range indicated by the frequency band range indication is adjacent to the higher-frequency 80 MHz frequency band range;

wherein the third resource unit is a resource unit comprising 242 subcarriers, the second resource unit is a resource unit comprising 484 subcarriers, and the first resource unit is a resource unit comprising 996 subcarriers.

~~a combination of a first resource unit corresponding to the frequency band range and two third resource units in a lower frequency 80 MHz adjacent to the first resource unit;~~

~~a combination of a first resource unit corresponding to the frequency band range and two~~

third resource units in a higher frequency 80 MHz adjacent to the first resource unit;

10. The method according to claim 3, wherein the plurality of resource units indicated by the resource unit indication are a plurality of resource units corresponding to any one of the following combinations:

5 a combination of two first resource units at a lowest frequency and one first resource unit at a highest frequency in a 320 MHz frequency band range;

a combination of one first resource unit at a lowest frequency and two first resource units at a highest frequency in a 320 MHz frequency band range;

a combination of three first resource units at a lowest frequency in a 320 MHz frequency band
10 range;

a combination of three first resource units at a highest frequency in a 320 MHz frequency band range;

wherein the first resource unit is a resource unit comprising 996 subcarriers.

a combination of one second resource unit and one third resource unit that are in the frequency
15 band range and one second resource unit and one third resource unit that are in a lower frequency band range adjacent to the frequency band range; and

a combination of one second resource unit and one third resource unit that are in the frequency band range and one second resource unit and one third resource unit that are in a higher frequency band range adjacent to the frequency band range, wherein

20 the sixth resource unit is a resource unit comprising 52 subcarriers, the fifth resource unit is a resource unit comprising 26 subcarriers, the fourth resource unit is a resource unit comprising 106 subcarriers, the third resource unit is a resource unit comprising 242 subcarriers, the second resource unit is a resource unit comprising 484 subcarriers, and the first resource unit is a resource unit comprising 996 subcarriers.

25 14. The method according to any one of claims 9 to 12, wherein

the resource unit combination indication indicates a combination of the fourth resource unit and the fifth resource unit;

the fourth resource unit is a resource unit comprising 106 subcarriers that is indicated by the resource unit indication; and

30 the fifth resource unit is a resource unit comprising 26 subcarriers that is in a center of a 20 MHz frequency band range in which the fourth resource unit is located.

15. The method according to any one of claims 9 to 12, wherein
the resource unit combination indication indicates a combination of the sixth resource unit
and the fifth resource unit;

the sixth resource unit is a resource unit comprising 52 subcarriers that is indicated by the
5 resource unit indication; and

the fifth resource unit is a resource unit comprising 26 subcarriers that is in a center of a 20
MHz frequency band range in which the sixth resource unit is located, or a resource unit
comprising 26 subcarriers that is on a same side as and that is adjacent to the sixth resource unit.

16. The method according to any one of claims 9 to 12, wherein
10 the resource unit combination indication indicates a combination of the second resource unit
and the third resource unit;

the second resource unit is a resource unit comprising 484 subcarriers that is indicated by the
resource unit indication; and

the third resource unit is a resource unit, in the frequency band range, comprising 242
15 subcarriers that is adjacent to the second resource unit, or a resource unit, in the frequency band
range, comprising 242 subcarriers that is not adjacent to the second resource unit.

17. The method according to any one of claims 9 to 12, wherein
the resource unit combination indication indicates a combination of two third resource units;
and

20 the two third resource units are two resource units, each comprising 242 subcarriers, on an
outermost side of the frequency band range.

18. The method according to any one of claims 9 to 12, wherein the first resource unit is a
resource unit comprising 996 subcarriers that is indicated by the resource unit indication; and

the resource unit combination indication indicates any one of the following combinations of
25 a plurality of resource units:

a combination of the first resource unit and the second resource unit, wherein the second
resource unit is a resource unit comprising 484 subcarriers that is not adjacent to the first resource
unit;

a combination of the first resource unit and the third resource unit, wherein the third resource
30 unit is a resource unit comprising 242 subcarriers that is not adjacent to the first resource unit; and

a combination of two third resource units, wherein the two third resource units are two

resource units, each comprising 242 subcarriers, on an outermost side of the frequency band range.

19. The method according to any one of claims 9 to 12, wherein the first resource unit is a resource unit comprising 996 subcarriers that is indicated by the resource unit indication; and

the resource unit combination indication indicates any one of the following combinations of a plurality of resource units:

a combination of the second resource unit and the first resource unit, wherein the second resource unit is a resource unit comprising 484 subcarriers that is in a lower frequency 80 MHz adjacent to the first resource unit and that is not adjacent to the first resource unit;

a combination of the second resource unit and the first resource unit, wherein the second resource unit is a resource unit comprising 484 subcarriers that is in a higher frequency 80 MHz adjacent to the first resource unit and that is not adjacent to the first resource unit;

a combination of the second resource unit, the third resource unit, and the first resource unit, wherein the second resource unit is a resource unit comprising 484 subcarriers that is in a lower frequency 80 MHz adjacent to the first resource unit, and the third resource unit is a resource unit comprising 242 subcarriers that is in the lower frequency 80 MHz adjacent to the first resource unit;

a combination of the second resource unit, the third resource unit, and the first resource unit, wherein the second resource unit is a resource unit comprising 484 subcarriers that is in a higher frequency 80 MHz adjacent to the first resource unit, and the third resource unit is a resource unit comprising 242 subcarriers that is in the higher frequency 80 MHz adjacent to the first resource unit; and

a combination of the first resource unit and two resource units that each comprise 996 subcarriers and that are adjacent to the first resource unit.

20. The method according to any one of claims 1 to 5, wherein the user information field comprises a frequency band range indication, a resource unit indication, and a resource unit combination indication;

the frequency band range indication indicates an 80 MHz frequency band range in a bandwidth;

the resource unit indication indicates one resource unit in the frequency band range; and

the resource unit combination indication indicates a plurality of resource units each comprising 996 subcarriers other than the resource unit comprising 996 subcarriers that is

indicated by the resource unit indication, and the plurality of resource units are used as the plurality of resource units allocated to the station.

~~24~~11. A resource allocation method, comprising:

determining, by an access point, a plurality of resource units allocated to a station; and

5 sending, by the access point, a trigger frame to the station, wherein ~~the trigger frame comprises a plurality of user information fields comprising association identifiers that are same as an association identifier of the station, and each user information field indicates one or more resource units allocated to the station; or the trigger frame comprises one user information field comprising an association identifier that is the same as an association identifier of the station, and~~
10 the one user information field indicates the plurality of resource units allocated to the station.

~~22. The method according to claim 21, wherein~~

~~a quantity N of user information fields in the trigger frame that are the same as the association identifier of the station is configured for the station in a protocol-predefined manner or by using signaling.~~

15 ~~23. The method according to claim 21, wherein~~

~~the user information field comprises an end flag, and the end flag indicates whether allocation of the resource unit to the station ends.~~

~~24. The method according to claim 21, wherein~~

~~the plurality of user information fields in the trigger frame that are the same as the association identifier of the station are arranged continuously.~~

~~25. The method according to any one of claims 21 to 24, wherein~~

~~the user information field comprises a resource unit indication, and the resource unit indication indicates the plurality of resource units allocated to the station.~~

~~26~~12. The method according to ~~any one of claims 21 to 24~~claim 11, wherein

25 the user information field comprises a frequency band range indication and a resource unit indication, the frequency band range indication indicates an 80 MHz frequency band range in a bandwidth, and the resource unit indication indicates one or more resource units allocated to the station.

~~27. The method according to any one of claims 21 to 24, wherein the user information field~~

30 ~~comprises a frequency band range indication, a resource unit indication, and a resource unit combination indication;~~

~~the frequency band range indication indicates an 80 MHz frequency band range in a bandwidth;~~

~~the resource unit indication indicates one resource unit in the frequency band range; and~~

~~the resource unit combination indication indicates a combination of a plurality of resource units, and the combination of the plurality of resource units comprises the resource unit indicated by the resource unit indication.~~

~~28~~13. The method according to ~~any one of claims 21 to 27~~claim 12, wherein the frequency band range indicated by the frequency band range indication is any one of the following:

a primary 80 MHz frequency band range, a secondary 80 MHz frequency band range, a third 80 MHz frequency band range, and a fourth 80 MHz frequency band range.

~~29. The method according to any one of claims 21 to 28, wherein the one resource unit indicated by the resource unit indication is any one of the following resource units:~~

~~any seventh resource unit, wherein the seventh resource unit is a resource unit comprising 2 × 996 subcarriers;~~

~~any sixth resource unit in the frequency band range indicated by the frequency band range indication, wherein the sixth resource unit is a resource unit comprising 52 subcarriers;~~

~~any fifth resource unit in the frequency band range indicated by the frequency band range indication, wherein the fifth resource unit is a resource unit comprising 26 subcarriers;~~

~~any fourth resource unit in the frequency band range indicated by the frequency band range indication, wherein the fourth resource unit is a resource unit comprising 106 subcarriers;~~

~~any third resource unit in the frequency band range indicated by the frequency band range indication, wherein the third resource unit is a resource unit comprising 242 subcarriers;~~

~~any second resource unit in the frequency band range indicated by the frequency band range indication, wherein the second resource unit is a resource unit comprising 484 subcarriers; and~~

~~any first resource unit in the frequency band range indicated by the frequency band range indication, wherein the first resource unit is a resource unit comprising 996 subcarriers.~~

~~30~~14. The method according to ~~either of claims 25 and 26~~claim 12, wherein the plurality of resource units indicated by the resource unit indication are a plurality of resource units corresponding to any one of the following combinations:

~~a combination of two first resource units, wherein the first resource unit is a resource unit comprising 996 subcarriers;~~

~~a combination of four first resource units;~~

a combination of a fourth resource unit at a lowest frequency in one 20 MHz frequency band range in the 80 MHz frequency band range ~~indicated by the frequency band range indication~~ and a fifth resource unit in a center of the 20 MHz frequency band range;

5 a combination of a fourth resource unit at a highest frequency in one 20 MHz frequency band range in the 80 MHz frequency band range and a fifth resource unit in a center of the 20 MHz frequency band range;

wherein the fifth resource unit is a resource unit comprising 26 subcarriers, the fourth resource unit is a resource unit comprising 106 subcarriers.

10 15. The method according to claim 12, wherein the plurality of resource units indicated by the resource unit indication are a plurality of resource units corresponding to any one of the following combinations:

a combination of a sixth resource unit at a second lowest frequency in one 20 MHz frequency band range in the 80 MHz frequency band range and a fifth resource unit in the 20 MHz frequency band range, wherein the fifth resource unit is on a same side as the sixth resource unit and is adjacent to the sixth resource unit;

a combination of a sixth resource unit at a second lowest frequency in one 20 MHz frequency band range in the 80 MHz frequency band and a fifth resource unit in a center of the 20 MHz frequency band range;

20 a combination of a sixth resource unit at a second highest frequency in one 20 MHz frequency band range in the 80 MHz frequency band and a fifth resource unit in the 20 MHz frequency band range, wherein the fifth resource unit is on a same side as the sixth resource unit and is adjacent to the sixth resource unit;

a combination of a sixth resource unit at a second highest frequency in one 20 MHz frequency band range in the 80 MHz frequency band and a fifth resource unit in a center of the 20 MHz frequency band range;

wherein the sixth resource unit is a resource unit comprising 52 subcarriers, the fifth resource unit is a resource unit comprising 26 subcarriers.

30 16. The method according to claim 12, wherein the plurality of resource units indicated by the resource unit indication are a plurality of resource units corresponding to any one of the following combinations:

a combination of a second resource unit and a third resource unit in the 80 MHz frequency band range, wherein the third resource unit is adjacent to the second resource unit;

a combination of a second resource unit and a third resource unit in the 80 MHz frequency band range, wherein the third resource unit is not adjacent to the second resource unit;

5 wherein the third resource unit is a resource unit comprising 242 subcarriers, the second resource unit is a resource unit comprising 484 subcarriers.

~~a combination of two third resource units on two sides of the frequency band range;~~

10 17. The method according to claim 12, wherein the plurality of resource units indicated by the resource unit indication are a plurality of resource units corresponding to any one of the following combinations:

a combination of a first resource unit corresponding to the 80 MHz frequency band range and a second resource unit that is in a lower-frequency 80 MHz frequency band range and that is not adjacent to the first resource unit, wherein the 80 MHz frequency band range indicated by the frequency band range indication is adjacent to the lower-frequency 80 MHz frequency band range;

15 a combination of a first resource unit corresponding to the 80 MHz frequency band range and a second resource unit that is in a higher-frequency 80 MHz frequency band range and that is not adjacent to the first resource unit, wherein the 80 MHz frequency band range indicated by the frequency band range indication is adjacent to the higher-frequency 80 MHz frequency band range;

20 wherein the first resource unit is a resource unit comprising 996 subcarriers, the second resource unit is a resource unit comprising 484 subcarriers.

18. The method according to claim 12, wherein the plurality of resource units indicated by the resource unit indication are a plurality of resource units corresponding to any one of the following combinations:

25 a combination of a first resource unit corresponding to the 80 MHz frequency band range and a second resource unit and a third resource unit that are in a lower-frequency 80 MHz frequency band range and that are adjacent to the first resource unit, wherein the 80 MHz frequency band range indicated by the frequency band range indication is adjacent to the lower-frequency 80 MHz frequency band range;

30 a combination of a first resource unit corresponding to the 80 MHz frequency band range and a second resource unit and a third resource unit that are in a higher-frequency 80 MHz frequency band range and that are adjacent to the first resource unit, wherein the 80 MHz frequency band

range indicated by the frequency band range indication is adjacent to the higher-frequency 80 MHz frequency band range;

wherein the third resource unit is a resource unit comprising 242 subcarriers, the second resource unit is a resource unit comprising 484 subcarriers, and the first resource unit is a resource unit comprising 996 subcarriers.

~~a combination of a first resource unit corresponding to the frequency band range and two third resource units in a lower frequency 80 MHz adjacent to the first resource unit;~~

~~a combination of a first resource unit corresponding to the frequency band range and two third resource units in a higher frequency 80 MHz adjacent to the first resource unit;~~

19. The method according to claim 12, wherein the plurality of resource units indicated by the resource unit indication are a plurality of resource units corresponding to any one of the following combinations:

a combination of two first resource units at a lowest frequency and one first resource unit at a highest frequency in a 320 MHz frequency band range;

a combination of one first resource unit at a lowest frequency and two first resource units at a highest frequency in a 320 MHz frequency band range;

a combination of three first resource units at a lowest frequency in a 320 MHz frequency band range;

a combination of three first resource units at a highest frequency in a 320 MHz frequency band range;

wherein the first resource unit is a resource unit comprising 996 subcarriers.

~~a combination of one second resource unit and one third resource unit that are in the frequency band range and one second resource unit and one third resource unit that are in a lower frequency band range adjacent to the frequency band range; and~~

~~a combination of one second resource unit and one third resource unit that are in the frequency band range and one second resource unit and one third resource unit that are in a higher frequency band range adjacent to the frequency band range, wherein~~

~~the sixth resource unit is a resource unit comprising 52 subcarriers, the fifth resource unit is a resource unit comprising 26 subcarriers, the fourth resource unit is a resource unit comprising 106 subcarriers, the third resource unit is a resource unit comprising 242 subcarriers, the second resource unit is a resource unit comprising 484 subcarriers, and the first resource unit is a resource~~

unit comprising 996 subcarriers.

31. The method according to any one of claims 27 to 29, wherein
the resource unit combination indication indicates a combination of the fourth resource unit
and the fifth resource unit;

5 the fourth resource unit is a resource unit comprising 106 subcarriers that is indicated by the
resource unit indication; and

the fifth resource unit is a resource unit comprising 26 subcarriers that is in a center of a 20
MHz frequency band range in which the fourth resource unit is located.

32. The method according to any one of claims 27 to 29, wherein
10 the resource unit combination indication indicates a combination of the sixth resource unit
and the fifth resource unit;

the sixth resource unit is a resource unit comprising 52 subcarriers that is indicated by the
resource unit indication; and

15 the fifth resource unit is a resource unit comprising 26 subcarriers that is in a center of a 20
MHz frequency band range in which the sixth resource unit is located, or a resource unit
comprising 26 subcarriers that is on a same side as and that is adjacent to the sixth resource unit.

33. The method according to any one of claims 27 to 29, wherein
the resource unit combination indication indicates a combination of the second resource unit
and the third resource unit;

20 the second resource unit is a resource unit comprising 484 subcarriers that is indicated by the
resource unit indication; and

the third resource unit is a resource unit, in the frequency band range, comprising 242
subcarriers that is adjacent to the second resource unit, or a resource unit, in the frequency band
range, comprising 242 subcarriers that is not adjacent to the second resource unit.

25 34. The method according to any one of claims 27 to 29, wherein
the resource unit combination indication indicates a combination of two third resource units;
and

the two third resource units are two resource units, each comprising 242 subcarriers, on an
outermost side of the frequency band range.

30 35. The method according to any one of claims 27 to 29, wherein the first resource unit is a
resource unit comprising 996 subcarriers that is indicated by the resource unit indication; and

the resource unit combination indication indicates any one of the following combinations of a plurality of resource units:

a combination of the first resource unit and the second resource unit, wherein the second resource unit is a resource unit comprising 484 subcarriers that is not adjacent to the first resource unit;

a combination of the first resource unit and the third resource unit, wherein the third resource unit is a resource unit comprising 484 subcarriers that is not adjacent to the first resource unit, and a resource unit comprising 242 subcarriers; and

a combination of two third resource units, wherein the two third resource units are two resource units, each comprising 242 subcarriers, on an outermost side of the frequency band range.

36. The method according to any one of claims 27 to 29, wherein the first resource unit is a resource unit comprising 996 subcarriers that is indicated by the resource unit indication; and

the resource unit combination indication indicates any one of the following combinations of a plurality of resource units:

a combination of the second resource unit and the first resource unit, wherein the second resource unit is a resource unit comprising 484 subcarriers that is in a lower frequency 80 MHz adjacent to the first resource unit and that is not adjacent to the first resource unit;

a combination of the second resource unit and the first resource unit, wherein the second resource unit is a resource unit comprising 484 subcarriers that is in a higher frequency 80 MHz adjacent to the first resource unit and that is not adjacent to the first resource unit;

a combination of the second resource unit, the third resource unit, and the first resource unit, wherein the second resource unit is a resource unit comprising 484 subcarriers that is in a lower frequency 80 MHz adjacent to the first resource unit, and the third resource unit is a resource unit comprising 242 subcarriers that is in the lower frequency 80 MHz adjacent to the first resource unit;

a combination of the second resource unit, the third resource unit, and the first resource unit, wherein the second resource unit is a resource unit comprising 484 subcarriers that is in a higher frequency 80 MHz adjacent to the first resource unit, and the third resource unit is a resource unit comprising 242 subcarriers that is in the higher frequency 80 MHz adjacent to the first resource unit; and

a combination of the first resource unit and two resource units that each comprise 996

subcarriers and that are adjacent to the first resource unit.

37. The method according to any one of claims 21 to 24, wherein the user information field comprises a frequency band range indication, a resource unit indication, and a resource unit combination indication;

5 the frequency band range indication indicates an 80 MHz frequency band range in a bandwidth;

the resource unit indication indicates one resource unit in the frequency band range; and

the resource unit combination indication indicates a plurality of resource units each comprising 996 subcarriers other than the resource unit comprising 996 subcarriers that is indicated by the resource unit indication, and the plurality of resource units are used as the plurality of resource units allocated to the station.

38. A communication apparatus, wherein the communication apparatus comprises:

a communication unit, configured to receive a trigger frame from an access point, wherein

15 the trigger frame comprises a plurality of user information fields comprising association identifiers that are the same as an association identifier of the communication apparatus, and each user information field indicates one or more resource units allocated to the communication apparatus; or the trigger frame comprises one user information field comprising an association identifier that is the same as an association identifier of the communication apparatus, and the one user information field indicates a plurality of resource units allocated to the communication apparatus; and

20 a processing unit, configured to determine the plurality of allocated resource units based on the trigger frame.

39. The communication apparatus according to claim 38, wherein a manner in which the processing unit determines the plurality of allocated resource units based on the trigger frame is specifically as follows:

25 selecting, from the trigger frame, one or more user information fields that are the same as the association identifier of the communication apparatus; and

for each of the selected one or more user information fields, determining one or more resource units indicated by the user information field, wherein

30 the one or more resource units indicated by each of the selected one or more user information fields are the plurality of resource units allocated to the communication apparatus.

40. The communication apparatus according to claim 39, wherein a manner in which the processing unit selects, from the trigger frame, one or more user information fields that are the same as the association identifier of the communication apparatus is specifically as follows:

separately parsing an association identifier indicated by an association identifier field in each of all the user information fields in the trigger frame; and

selecting, from all the parsed user information fields, one or more user information domains that are the same as the association identifier of the communication apparatus.

41. The communication apparatus according to claim 39, wherein a manner in which the processing unit selects, from the trigger frame, one or more user information fields that are the same as the association identifier of the communication apparatus is specifically as follows:

parsing, based on an index of each user information field in the trigger frame, whether an association identifier indicated by an association identifier field in each user information field is the same as the association identifier of the communication apparatus, and stopping performing the step of parsing whether an association identifier indicated by an association identifier field in each user information field is the same as the association identifier of the communication apparatus, until a quantity of user information fields that are the same as the association identifier of the communication apparatus is equal to N; and

selecting, from all the parsed user information fields, N user information fields that are the same as the association identifier of the communication apparatus, wherein N is configured for the communication apparatus in a protocol predefined manner or by using signaling.

42. The communication apparatus according to claim 39, wherein a manner in which the processing unit selects, from the trigger frame, one or more user information fields that are the same as the association identifier of the communication apparatus is specifically as follows:

parsing, based on an index of each user information field in the trigger frame, whether an association identifier indicated by an association identifier field in each user information field is the same as the association identifier of the communication apparatus, and stopping performing the step of parsing whether an association identifier indicated by an association identifier field in each user information field is the same as the association identifier of the communication apparatus, until an end flag in a parsed user information field indicates that allocation of the resource unit to the communication apparatus ends; and

selecting, from all the parsed user information fields, one or more user information fields that

are the same as the association identifier of the communication apparatus.

43. The communication apparatus according to claim 39, wherein a manner in which the processing unit selects, from the trigger frame, one or more user information fields that are the same as the association identifier of the communication apparatus is specifically as follows:

5 parsing, based on an index of each user information field and starting from a first user information field, in the trigger frame, that is the same as the association identifier of the communication apparatus, whether an association identifier indicated by an association identifier field in each user information field is the same as the association identifier of the communication apparatus, until a user information field different from the association identifier of the communication apparatus is parsed; and

10 selecting, from all the parsed user information fields, one or more user information fields that are the same as the association identifier of the communication apparatus.

44. The communication apparatus according to any one of claims 39 to 43, wherein the user information field comprises a resource unit indication; and

15 a manner in which the processing unit determines a plurality of resource units indicated by the user information field is specifically as follows:

determining the plurality of resource units indicated by the resource unit indication in the user information field.

45. The communication apparatus according to any one of claims 39 to 43, wherein the user information field comprises a frequency band range indication and a resource unit indication, the frequency band range indication indicates an 80 MHz frequency band range in a bandwidth, and the resource unit indication indicates one or more resource units; and

a manner in which the processing unit determines a plurality of resource units indicated by the user information field is specifically as follows:

25 determining, based on the frequency band range indicated by the frequency band range indication, the one or more resource units indicated by the resource unit indication.

46. The communication apparatus according to any one of claims 39 to 42, wherein the user information field comprises a frequency band range indication, a resource unit indication, and a resource unit combination indication;

30 the frequency band range indication indicates an 80 MHz frequency band range in a bandwidth;

the resource unit indication indicates one resource unit in the frequency band range; and
the resource unit combination indication indicates a combination of a plurality of resource units, and the combination of the plurality of resource units comprises the resource unit indicated by the resource unit indication.

5 47. The communication apparatus according to claim 46, wherein a manner in which the processing unit determines a plurality of resource units indicated by the user information field is specifically as follows:

determining, based on the resource unit combination indication and the resource unit indicated by the resource unit indication, the combination of the plurality of resource units as the
10 plurality of resource units indicated by the user information field.

48. The communication apparatus according to any one of claims 45 to 47, wherein the frequency band range indicated by the frequency band range indication is any one of the following:
a primary 80 MHz frequency band range, a secondary 80 MHz frequency band range, a third
80 MHz frequency band range, and a fourth 80 MHz frequency band range.

15 49. The communication apparatus according to any one of claims 45 to 48, wherein the one resource unit indicated by the resource unit indication is any one of the following resource units:

any seventh resource unit, wherein the seventh resource unit is a resource unit comprising 2
x 996 subcarriers;

any sixth resource unit in the frequency band range indicated by the frequency band range
20 indication, wherein the sixth resource unit is a resource unit comprising 52 subcarriers;

any fifth resource unit in the frequency band range indicated by the frequency band range indication, wherein the fifth resource unit is a resource unit comprising 26 subcarriers;

any fourth resource unit in the frequency band range indicated by the frequency band range indication, wherein the fourth resource unit is a resource unit comprising 106 subcarriers;

25 any third resource unit in the frequency band range indicated by the frequency band range indication, wherein the third resource unit is a resource unit comprising 242 subcarriers;

any second resource unit in the frequency band range indicated by the frequency band range indication, wherein the second resource unit is a resource unit comprising 484 subcarriers; and

any first resource unit in the frequency band range indicated by the frequency band range
30 indication, wherein the first resource unit is a resource unit comprising 996 subcarriers.

50. The communication apparatus according to claim 45 or 46, wherein the plurality of

resource units indicated by the resource unit indication are a plurality of resource units corresponding to any one of the following combinations:

a combination of two first resource units, wherein the first resource unit is a resource unit comprising 996 subcarriers;

5 a combination of four first resource units;

a combination of a fourth resource unit at a lowest frequency in one 20 MHz frequency band range indicated by the frequency band range indication and a fifth resource unit in a center of the 20 MHz frequency band range;

10 a combination of a fourth resource unit at a highest frequency in one 20 MHz frequency band range and a fifth resource unit in a center of the 20 MHz frequency band range;

a combination of a sixth resource unit at a second lowest frequency in one 20 MHz frequency band range and a fifth resource unit, in the 20 MHz frequency band range, that is on a same side as and that is adjacent to the sixth resource unit;

15 a combination of a sixth resource unit at a second lowest frequency in one 20 MHz frequency band range and a fifth resource unit in a center of the 20 MHz frequency band range;

a combination of a sixth resource unit at a second highest frequency in one 20 MHz frequency band range and a fifth resource unit, in the 20 MHz frequency band range, that is on a same side as and that is adjacent to the sixth resource unit;

20 a combination of a sixth resource unit at a second highest frequency in one 20 MHz frequency band range and a fifth resource unit in a center of the 20 MHz frequency band range;

a combination of a second resource unit in the frequency band range and a third resource unit adjacent to the second resource unit;

a combination of a second resource unit in the frequency band range and a third resource unit that is not adjacent to the second resource unit;

25 a combination of two third resource units on two sides of the frequency band range;

a combination of a first resource unit corresponding to the frequency band range and a second resource unit that is in a lower frequency 80 MHz adjacent to the first resource unit and that is not adjacent to the first resource unit;

30 a combination of a first resource unit corresponding to the frequency band range and a second resource unit that is in a higher frequency 80 MHz adjacent to the first resource unit and that is not adjacent to the first resource unit;

a combination of a first resource unit corresponding to the frequency band range and a second resource unit and a third resource unit that are in a lower frequency 80 MHz adjacent to the first resource unit and that are adjacent to the first resource unit;

a combination of a first resource unit corresponding to the frequency band range and a second resource unit and a third resource unit that are in a higher frequency 80 MHz adjacent to the first resource unit and that are adjacent to the first resource unit;

a combination of a first resource unit corresponding to the frequency band range and two third resource units in a lower frequency 80 MHz adjacent to the first resource unit;

a combination of a first resource unit corresponding to the frequency band range and two third resource units in a higher frequency 80 MHz adjacent to the first resource unit;

a combination of two first resource units at a lowest frequency and one first resource unit at a highest frequency in a 320 MHz frequency band range;

a combination of one first resource unit at a lowest frequency and two first resource units at a highest frequency in a 320 MHz frequency band range;

a combination of three first resource units at a lowest frequency in a 320 MHz frequency band range;

a combination of three first resource units at a highest frequency in a 320 MHz frequency band range;

a combination of one second resource unit and one third resource unit that are in the frequency band range and one second resource unit and one third resource unit that are in a lower frequency band range adjacent to the frequency band range; and

a combination of one second resource unit and one third resource unit that are in the frequency band range and one second resource unit and one third resource unit that are in a higher frequency band range adjacent to the frequency band range, wherein

the sixth resource unit is a resource unit comprising 52 subcarriers, the fifth resource unit is a resource unit comprising 26 subcarriers, the fourth resource unit is a resource unit comprising 106 subcarriers, the third resource unit is a resource unit comprising 242 subcarriers, the second resource unit is a resource unit comprising 484 subcarriers, and the first resource unit is a resource unit comprising 996 subcarriers.

51. The communication apparatus according to any one of claims 46 to 49, wherein

the resource unit combination indication indicates a combination of the fourth resource unit

and the fifth resource unit;

the fourth resource unit is a resource unit comprising 106 subcarriers that is indicated by the resource unit indication; and

5 the fifth resource unit is a resource unit comprising 26 subcarriers that is in a center of a 20 MHz frequency band range in which the fourth resource unit is located.

52. The communication apparatus according to any one of claims 46 to 49, wherein the resource unit combination indication indicates a combination of the sixth resource unit and the fifth resource unit;

10 the sixth resource unit is a resource unit comprising 52 subcarriers that is indicated by the resource unit indication; and

the fifth resource unit is a resource unit comprising 26 subcarriers that is in a center of a 20 MHz frequency band range in which the sixth resource unit is located, or a resource unit comprising 26 subcarriers that is on a same side as and that is adjacent to the sixth resource unit.

15 53. The communication apparatus according to any one of claims 46 to 49, wherein the resource unit combination indication indicates a combination of the second resource unit and the third resource unit;

the second resource unit is a resource unit comprising 484 subcarriers that is indicated by the resource unit indication; and

20 the third resource unit is a resource unit, in the frequency band range, comprising 242 subcarriers that is adjacent to the second resource unit, or a resource unit, in the frequency band range, comprising 242 subcarriers that is not adjacent to the second resource unit.

54. The communication apparatus according to any one of claims 46 to 49, wherein the resource unit combination indication indicates a combination of two third resource units; and

25 the two third resource units are two resource units, each comprising 242 subcarriers, on an outermost side of the frequency band range.

55. The communication apparatus according to any one of claims 46 to 49, wherein the first resource unit is a resource unit comprising 996 subcarriers that is indicated by the resource unit indication; and

30 the resource unit combination indication indicates any one of the following combinations of a plurality of resource units:

~~a combination of the first resource unit and the second resource unit, wherein the second resource unit is a resource unit comprising 484 subcarriers that is not adjacent to the first resource unit;~~

~~a combination of the first resource unit and the third resource unit, wherein the third resource unit is a resource unit comprising 484 subcarriers that is not adjacent to the first resource unit, and a resource unit comprising 242 subcarriers; and~~

~~a combination of two third resource units, wherein the two third resource units are two resource units, each comprising 242 subcarriers, on an outermost side of the frequency band range.~~

~~56. The communication apparatus according to any one of claims 46 to 49, wherein the first resource unit is a resource unit comprising 996 subcarriers that is indicated by the resource unit indication; and~~

~~the resource unit combination indication indicates any one of the following combinations of a plurality of resource units:~~

~~a combination of the second resource unit and the first resource unit, wherein the second resource unit is a resource unit comprising 484 subcarriers that is in a lower frequency 80 MHz adjacent to the first resource unit and that is not adjacent to the first resource unit;~~

~~a combination of the second resource unit and the first resource unit, wherein the second resource unit is a resource unit comprising 484 subcarriers that is in a higher frequency 80 MHz adjacent to the first resource unit and that is not adjacent to the first resource unit;~~

~~a combination of the second resource unit, the third resource unit, and the first resource unit, wherein the second resource unit is a resource unit comprising 484 subcarriers that is in a lower frequency 80 MHz adjacent to the first resource unit, and the third resource unit is a resource unit comprising 242 subcarriers that is in the lower frequency 80 MHz adjacent to the first resource unit;~~

~~a combination of the second resource unit, the third resource unit, and the first resource unit, wherein the second resource unit is a resource unit comprising 484 subcarriers that is in a higher frequency 80 MHz adjacent to the first resource unit, and the third resource unit is a resource unit comprising 242 subcarriers that is in the higher frequency 80 MHz adjacent to the first resource unit; and~~

~~a combination of the first resource unit and two resource units that each comprise 996 subcarriers and that are adjacent to the first resource unit.~~

57. The communication apparatus according to any one of claims 39 to 42, wherein the user information field comprises a frequency band range indication, a resource unit indication, and a resource unit combination indication;

the frequency band range indication indicates an 80 MHz frequency band range in a bandwidth;

the resource unit indication indicates one resource unit in the frequency band range; and

the resource unit combination indication indicates a plurality of resource units each comprising 996 subcarriers other than the resource unit comprising 996 subcarriers that is indicated by the resource unit indication, and the plurality of resource units are used as the plurality of resource units allocated to the communication station.

58. A communication apparatus, wherein the communication apparatus comprises:

a processing unit, configured to determine a plurality of resource units allocated to a station; and

a communication unit, configured to send a trigger frame to the station, wherein the trigger frame comprises a plurality of user information fields comprising association identifiers that are the same as an association identifier of the station, and each user information field indicates one or more resource units allocated to the station; or the trigger frame comprises one user information field comprising an association identifier that is the same as an association identifier of the station, and the one user information field indicates the plurality of resource units allocated to the station.

59. The communication apparatus according to claim 58, wherein a quantity N of user information fields in the trigger frame that are the same as the association identifier of the station is configured for the station in a protocol predefined manner or by using signaling.

60. The communication apparatus according to claim 58, wherein the user information field comprises an end flag, and the end flag indicates whether allocation of the resource unit to the station ends.

61. The communication apparatus according to claim 58, wherein the plurality of user information fields in the trigger frame that are the same as the association identifier of the station are arranged continuously.

62. The communication apparatus according to any one of claims 58 to 61, wherein the user information field comprises a resource unit indication, and the resource unit indication indicates the plurality of resource units allocated to the station.

63. The communication apparatus according to any one of claims 58 to 61, wherein the user information field comprises a frequency band range indication and a resource unit indication, the frequency band range indication indicates an 80 MHz frequency band range in a bandwidth, and the resource unit indication indicates one or more resource units allocated to the station.

64. The communication apparatus according to any one of claims 58 to 61, wherein the user information field comprises a frequency band range indication, a resource unit indication, and a resource unit combination indication;

the frequency band range indication indicates an 80 MHz frequency band range in a bandwidth;

the resource unit indication indicates one resource unit in the frequency band range; and

the resource unit combination indication indicates a combination of a plurality of resource units, and the combination of the plurality of resource units comprises the resource unit indicated by the resource unit indication.

65. The communication apparatus according to any one of claims 58 to 64, wherein the frequency band range indicated by the frequency band range indication is any one of the following: a primary 80 MHz frequency band range, a secondary 80 MHz frequency band range, a third 80 MHz frequency band range, and a fourth 80 MHz frequency band range.

66. The communication apparatus according to any one of claims 58 to 65, wherein the one resource unit indicated by the resource unit indication is any one of the following resource units:

any seventh resource unit, wherein the seventh resource unit is a resource unit comprising 2 x 996 subcarriers;

any sixth resource unit in the frequency band range indicated by the frequency band range indication, wherein the sixth resource unit is a resource unit comprising 52 subcarriers;

any fifth resource unit in the frequency band range indicated by the frequency band range indication, wherein the fifth resource unit is a resource unit comprising 26 subcarriers;

any fourth resource unit in the frequency band range indicated by the frequency band range indication, wherein the fourth resource unit is a resource unit comprising 106 subcarriers;

any third resource unit in the frequency band range indicated by the frequency band range indication, wherein the third resource unit is a resource unit comprising 242 subcarriers;

any second resource unit in the frequency band range indicated by the frequency band range indication, wherein the second resource unit is a resource unit comprising 484 subcarriers; and

any first resource unit in the frequency band range indicated by the frequency band range indication, wherein the first resource unit is a resource unit comprising 996 subcarriers.

67. The communication apparatus according to either of claims 62 and 63, wherein the plurality of resource units indicated by the resource unit indication are a plurality of resource units corresponding to any one of the following combinations:

a combination of two first resource units, wherein the first resource unit is a resource unit comprising 996 subcarriers;

a combination of four first resource units;

a combination of a fourth resource unit at a lowest frequency in one 20 MHz frequency band range indicated by the frequency band range indication and a fifth resource unit in a center of the 20 MHz frequency band range;

a combination of a fourth resource unit at a highest frequency in one 20 MHz frequency band range and a fifth resource unit in a center of the 20 MHz frequency band range;

a combination of a sixth resource unit at a second lowest frequency in one 20 MHz frequency band range and a fifth resource unit, in the 20 MHz frequency band range, that is on a same side as and that is adjacent to the sixth resource unit;

a combination of a sixth resource unit at a second lowest frequency in one 20 MHz frequency band range and a fifth resource unit in a center of the 20 MHz frequency band range;

a combination of a sixth resource unit at a second highest frequency in one 20 MHz frequency band range and a fifth resource unit, in the 20 MHz frequency band range, that is on a same side as and that is adjacent to the sixth resource unit;

a combination of a sixth resource unit at a second highest frequency in one 20 MHz frequency band range and a fifth resource unit in a center of the 20 MHz frequency band range;

a combination of a second resource unit in the frequency band range and a third resource unit adjacent to the second resource unit;

a combination of a second resource unit in the frequency band range and a third resource unit that is not adjacent to the second resource unit;

a combination of two third resource units on two sides of the frequency band range;

a combination of a first resource unit corresponding to the frequency band range and a second resource unit that is in a lower frequency 80 MHz adjacent to the first resource unit and that is not adjacent to the first resource unit;

a combination of a first resource unit corresponding to the frequency band range and a second resource unit that is in a higher frequency 80 MHz adjacent to the first resource unit and that is not adjacent to the first resource unit;

5 a combination of a first resource unit corresponding to the frequency band range and a second resource unit and a third resource unit that are in a lower frequency 80 MHz adjacent to the first resource unit and that are adjacent to the first resource unit;

a combination of a first resource unit corresponding to the frequency band range and a second resource unit and a third resource unit that are in a higher frequency 80 MHz adjacent to the first resource unit and that are adjacent to the first resource unit;

10 a combination of a first resource unit corresponding to the frequency band range and two third resource units in a lower frequency 80 MHz adjacent to the first resource unit;

a combination of a first resource unit corresponding to the frequency band range and two third resource units in a higher frequency 80 MHz adjacent to the first resource unit;

15 a combination of two first resource units at a lowest frequency and one first resource unit at a highest frequency in a 320 MHz frequency band range;

a combination of one first resource unit at a lowest frequency and two first resource units at a highest frequency in a 320 MHz frequency band range;

a combination of three first resource units at a lowest frequency in a 320 MHz frequency band range;

20 a combination of three first resource units at a highest frequency in a 320 MHz frequency band range;

a combination of one second resource unit and one third resource unit that are in the frequency band range and one second resource unit and one third resource unit that are in a lower frequency band range adjacent to the frequency band range; and

25 a combination of one second resource unit and one third resource unit that are in the frequency band range and one second resource unit and one third resource unit that are in a higher frequency band range adjacent to the frequency band range, wherein

the sixth resource unit is a resource unit comprising 52 subcarriers, the fifth resource unit is a resource unit comprising 26 subcarriers, the fourth resource unit is a resource unit comprising 106 subcarriers, the third resource unit is a resource unit comprising 242 subcarriers, the second resource unit is a resource unit comprising 484 subcarriers, and the first resource unit is a resource

30

unit comprising 996 subcarriers.

68. The communication apparatus according to any one of claims 64 to 66, wherein the resource unit combination indication indicates a combination of the fourth resource unit and the fifth resource unit;

5 the fourth resource unit is a resource unit comprising 106 subcarriers that is indicated by the resource unit indication; and

the fifth resource unit is a resource unit comprising 26 subcarriers that is in a center of a 20 MHz frequency band range in which the fourth resource unit is located.

69. The communication apparatus according to any one of claims 64 to 66, wherein

10 the resource unit combination indication indicates a combination of the sixth resource unit and the fifth resource unit;

the sixth resource unit is a resource unit comprising 52 subcarriers that is indicated by the resource unit indication; and

15 the fifth resource unit is a resource unit comprising 26 subcarriers that is in a center of a 20 MHz frequency band range in which the sixth resource unit is located, or a resource unit comprising 26 subcarriers that is on a same side as and that is adjacent to the sixth resource unit.

70. The communication apparatus according to any one of claims 64 to 66, wherein

the resource unit combination indication indicates a combination of the second resource unit and the third resource unit;

20 the second resource unit is a resource unit comprising 484 subcarriers that is indicated by the resource unit indication; and

the third resource unit is a resource unit, in the frequency band range, comprising 242 subcarriers that is adjacent to the second resource unit, or a resource unit, in the frequency band range, comprising 242 subcarriers that is not adjacent to the second resource unit.

25 71. The communication apparatus according to any one of claims 64 to 66, wherein

the resource unit combination indication indicates a combination of two third resource units; and

the two third resource units are two resource units, each comprising 242 subcarriers, on an outermost side of the frequency band range.

30 72. The communication apparatus according to any one of claims 64 to 66, wherein

the first resource unit is a resource unit comprising 996 subcarriers that is indicated by the

resource-unit indication; and

~~the resource-unit combination indication indicates any one of the following combinations of a plurality of resource units:~~

~~a combination of the first resource unit and the second resource unit, wherein the second resource unit is a resource unit comprising 484 subcarriers that is not adjacent to the first resource unit;~~

~~a combination of the first resource unit and the third resource unit, wherein the third resource unit is a resource unit comprising 484 subcarriers that is not adjacent to the first resource unit, and a resource unit comprising 242 subcarriers; and~~

~~a combination of two third resource units, wherein the two third resource units are two resource units, each comprising 242 subcarriers, on an outermost side of the frequency band range.~~

~~73. The communication apparatus according to any one of claims 64 to 66, wherein~~

~~the first resource unit is a resource unit comprising 996 subcarriers that is indicated by the resource-unit indication; and~~

~~the resource-unit combination indication indicates any one of the following combinations of a plurality of resource units:~~

~~a combination of the second resource unit and the first resource unit, wherein the second resource unit is a resource unit comprising 484 subcarriers that is in a lower frequency 80 MHz adjacent to the first resource unit and that is not adjacent to the first resource unit;~~

~~a combination of the second resource unit and the first resource unit, wherein the second resource unit is a resource unit comprising 484 subcarriers that is in a higher frequency 80 MHz adjacent to the first resource unit and that is not adjacent to the first resource unit;~~

~~a combination of the second resource unit, the third resource unit, and the first resource unit, wherein the second resource unit is a resource unit comprising 484 subcarriers that is in a lower frequency 80 MHz adjacent to the first resource unit, and the third resource unit is a resource unit comprising 242 subcarriers that is in the lower frequency 80 MHz adjacent to the first resource unit;~~

~~a combination of the second resource unit, the third resource unit, and the first resource unit, wherein the second resource unit is a resource unit comprising 484 subcarriers that is in a higher frequency 80 MHz adjacent to the first resource unit, and the third resource unit is a resource unit comprising 242 subcarriers that is in the higher frequency 80 MHz adjacent to the first resource unit; and~~

a combination of the first resource unit and two resource units that each comprise 996 subcarriers and that are adjacent to the first resource unit.

74. The communication apparatus according to any one of claims 58 to 61, wherein the user information field comprises a frequency band range indication, a resource unit indication, and a resource unit combination indication;

the frequency band range indication indicates an 80 MHz frequency band range in a bandwidth;

the resource unit indication indicates one resource unit in the frequency band range; and

the resource unit combination indication indicates a plurality of resource units each comprising 996 subcarriers other than the resource unit comprising 996 subcarriers that is indicated by the resource unit indication, and the plurality of resource units are used as the plurality of resource units allocated to the station.

7520. A communication apparatus, comprising a processor, a memory, and a transceiver, wherein

the transceiver is configured to receive a trigger frame;

the memory is configured to store program code; and

the processor is configured to invoke the program code from the memory, to perform cause the communication apparatus to perform the method according in to any one of claims 1 to 2010.

7621. An access point, comprising a processor, a memory, and a transceiver, wherein

the transceiver is configured to send a trigger frame;

the memory is configured to store program code; and

the processor is configured to invoke the program code from the memory, to perform cause the access point to perform the method according in to any one of claims 21-11 to 3719.

7722. A computer-readable storage medium, wherein the computer-readable storage medium is configured to store instructions, and when the instructions are executed by a processor, a station comprising the processor is cause to perform the method according in to any one of claims 1 to 2010 is implemented.

7823. A computer-readable storage medium, wherein the computer-readable storage medium is configured to store instructions, and when the instructions are executed by a processor, an access point comprising the processor is cause to perform the method according to in any one of claims 21-11 to 37 is implemented19.

24. A chip system, comprising:

at least one processor; and

a computer-readable storage medium, wherein the storage medium stores instructions, and wherein the instructions, when executed by the at least one processor, cause a communication apparatus comprising the chip system to perform the method in to any one of claims 1 to 10.

25. A chip system, comprising:

at least one processor; and

a computer-readable storage medium, wherein the storage medium stores instructions, and wherein the instructions, when executed by the at least one processor, cause an access point comprising the chip system to perform the method in to any one of claims 11 to 19.

~~79. A chip system, comprising at least one processor and an interface, wherein the interface is configured to receive a trigger frame from an access point, wherein the trigger frame comprises a plurality of user information fields that are the same as an association identifier of the station, and each user information field indicates one or more resource units allocated to the station; or the trigger frame comprises one user information field that is the same as an association identifier of the station, and the one user information field indicates a plurality of resource units allocated to the station; and~~

~~the processor is configured to determine the plurality of allocated resource units based on the trigger frame.~~

~~80. A chip system, comprising at least one processor and an interface, wherein the processor is configured to determine a plurality of resource units allocated to a station; and~~

~~the interface is configured to send a trigger frame to the station, wherein the trigger frame comprises a plurality of user information fields that are the same as an association identifier of the station, and each user information field indicates one or more resource units allocated to the station; or the trigger frame comprises one user information field that is the same as an association identifier of the station, and the one user information field indicates the plurality of resource units allocated to the station.~~