

CLAIMS

What is claimed is:

1. A communication method, comprising:

receiving, by a first terminal device, first information from a network device, wherein the first
5 information indicates a first control resource set, a quantity of resource blocks in the first control
resource set is N , a quantity of resource element group bundles REG bundles in the first control
resource set is W , a bandwidth supported by the first terminal device is less than a bandwidth
corresponding to the N resource blocks, the bandwidth supported by the first terminal device is
less than a bandwidth supported by a second terminal device, N and W are positive integers; and
10 an aggregation level AL supported by the first terminal device comprises X , and an AL supported
by the second terminal device does not comprise X , and/or a quantity of candidate control channels
supported by the first terminal device in a first search space SS set is $Y1$, a quantity of candidate
control channels supported by the second terminal device in the first search space set is Z , and $Y1$
is less than or equal to Z ; and

15 monitoring, by the first terminal device, a first control channel on M REG bundles in the W
REG bundles or on M control channel element CCE resources corresponding to the M REG
bundles, wherein M is less than W .

2. The method according to claim 1, wherein X comprises at least one of the following values:
6, 12, 20, and 22.

20 3. The method according to any one of claims 1 and 2, wherein

when a quantity l of symbols in the first control resource set is equal to 3, N is equal to 96,
and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth
corresponding to $N/2$ resource blocks, a quantity of candidate control channels whose AL
supported by the first terminal device is equal to 20 is 1, a quantity of candidate control channels
25 whose AL supported by the first terminal device is equal to 16 is 1, a quantity of candidate control
channels whose AL supported by the first terminal device is equal to 8 is 1 or 2, a quantity of
candidate control channels whose AL supported by the first terminal device is equal to 4 is 2 or 3,
and/or a quantity of candidate control channels whose AL supported by the first terminal device is
equal to 22 is 1;

30 when a quantity l of symbols in the first control resource set is equal to 2, N is equal to 96,

and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/2$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 16 is 1, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 12 is 1, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 8 is 1 or 2, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 2 or 3;

when a quantity l of symbols in the first control resource set is equal to 1, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/2$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 6 is 1, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1;

when a quantity l of symbols in the first control resource set is equal to 3, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/2$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 8 is 1, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1;

when a quantity l of symbols in the first control resource set is equal to 2, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/2$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 6 is 1, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1;

when a quantity l of symbols in the first control resource set is equal to 1, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/2$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 2 is 1;

when a quantity l of symbols in the first control resource set is equal to 3, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/4$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 12 is 1, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 8 is 1, and/or a quantity of candidate

control channels whose AL supported by the first terminal device is equal to 4 is 1 or 2;

when a quantity l of symbols in the first control resource set is equal to 2, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/4$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 8 is 1, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1;

when a quantity l of symbols in the first control resource set is equal to 1, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/4$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1;

when a quantity l of symbols in the first control resource set is equal to 3, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/4$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 6 is 1, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1;

when a quantity l of symbols in the first control resource set is equal to 2, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/4$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1; or

when a quantity l of symbols in the first control resource set is equal to 1, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/4$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 2 is 1.

4. The method according to any one of claims 1 to 3, wherein

indexes of Y REG bundles in X REG bundles corresponding to the AL that is supported by the first terminal device and that is equal to X are $\{i, i+1, \dots, i+(Y-1)\}$, indexes of remaining $(X-Y)$ REG bundles in the X REG bundles are $\{j, j+1, \dots, j+(X-Y-1)\}$, and i and j are positive integers; and

i and j meet at least one of the following cases:

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth

corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=16$, $B=32$, and $C=8$, when $X=8$, $A=20$, $B=32$, and $C=4$, when $X=8$, $A=16$, $B=36$, and $C=4$, when $X=4$, $A=16$, $B=34$, and $C=2$, when $X=4$, $A=20$, $B=34$, and $C=2$, when $X=4$, $A=20$, $B=32$, and $C=2$, when $X=4$, $A=22$, $B=34$, and $C=2$, when $X=20$, $A=16$, $B=28$, and $C=8$, when $X=22$, $A=16$, $B=32$, and $C=8$, and/or when $X=24$, $A=16$, $B=28$, and $C=8$;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=12$, $B=16$, and $C=4$, when $X=12$, $A=12$, $B=20$, and $C=4$, when $X=8$, $A=12$, $B=24$, and $C=4$, when $X=8$, $A=12$, $B=20$, and $C=4$, when $X=4$, $A=12$, $B=20$, and $C=2$, when $X=4$, $A=14$, $B=22$, and $C=2$, and/or when $X=8$ and $Y=8$, indexes of eight REG bundles are i , $i=0, 1, 2, \dots, \text{or } 7$, $i=(n+A)\bmod W/2$, and $A=\{14,15,18,19,22,23,26,27\}$;

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=8$, $A=6$, $B=8$, and $C=2$, when $X=6$, $A=6$, $B=10$, and $C=2$, and/or when $X=4$, $A=6$, $B=12$, and $C=2$;

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=12$, $A=8$, $B=12$, and $C=4$, when $X=8$,

A=8, B=16, and C=4, when X=4, A=8 and C=4, and/or when X=4, A=8, B=18, and C=2;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when X=8, A=6, B=8, and C=2, when X=6, A=6, B=10, and C=2, and/or when X=4, A=6, B=12, and C=2; and

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when X=2, A=2 and C=2.

5. The method according to any one of claims 1 to 3, wherein

indexes of Y CCE resources in X CCE resources corresponding to the AL that is supported by the first terminal device and that is equal to X are $\{i, i+1, \dots, i+(Y-1)\}$, and indexes of $(X-Y)$ CCE resources in the X CCE resources are $\{j, j+1, \dots, j+(X-Y-1)\}$; and

i and j meet at least one of the following cases:

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(32+T+A)\bmod W/2$, $j=(17-T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when X=16, A=0, B=0, and C=8, when X=8, A=8, B=0, and C=4, when X=8, A=0, B=8, and C=4, when X=4, A=0, B=4, and C=2, when X=4, A=8, B=4, and C=2, when X=4, A=8, B=0, and C=2, when X=4, A=12, B=4, and C=2, when X=20, A=0, B=-8, and C=8, when X=22, A=0, B=0, and C=8, and/or when X=24, A=0, B=-8, and C=8;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(24+T+A)\bmod W/2$, $j=(17-T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=0$, $B=-16$, and $C=4$, when $X=12$, $A=0$, $B=-8$, and $C=4$, when $X=8$, $A=0$, $B=0$, and $C=4$, when $X=8$, $A=0$, $B=-8$, and $C=4$, when $X=4$, $A=0$, $B=-8$, and $C=2$, when $X=4$, $A=4$, $B=-4$, and $C=2$, and/or when $X=8$ and $Y=8$, indexes of eight CCE resources are i , $i=0$, 1, 2, 3, 4, ..., or 7, when $i=0$ or 1, $i=(A+T)\bmod W/2$, and $A=\{28,30\}$, when $i=2, 3, 4, \dots$, or 7, $i=(A-T)\bmod W/2$, and $A=\{5,7,13,15,21,23\}$, and when $n \bmod W$ belongs to $\{2^{l-u} \text{ to } (2^{l-u}+W/2-1)\}$, $T=1$, or when $n \bmod W$ does not belong to $\{2^{l-u} \text{ to } (2^{l-u}+W/2-1)\}$, $T=0$;

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(12+T+A)\bmod W/2$, $j=(9-T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=8$, $A=0$, $B=-8$, and $C=2$, when $X=6$, $A=0$, $B=-4$, and $C=2$, and/or when $X=4$, $A=0$, $B=0$, and $C=2$;

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(16+T+A)\bmod W/2$, $j=(9-T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=12$, $A=0$, $B=-8$, and $C=4$, when $X=8$, $A=0$, $B=0$, and $C=4$, when $X=4$, $A=0$ and $C=4$, and/or when $X=4$, $A=0$, $B=4$, and $C=2$;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(12+T+A)\bmod W/2$, $j=(9-T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=8$, $A=0$, $B=-8$, and $C=2$, when $X=6$, $A=0$, $B=-4$, and $C=2$, and/or when $X=4$, $A=0$, $B=0$, and $C=2$; and

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(4+T+A)\bmod W/2$, $j=(5-T+B)\bmod W/2$, $Y=C$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=2$, $A=0$ and $C=2$.

6. The method according to any one of claims 1 to 3, wherein

resource indexes of Y REG bundles in X REG bundles corresponding to the AL that is supported by the first terminal device and that is equal to X are $\{i, i+1, \dots, i+(Y-1)\}$, and indexes of remaining $(X-Y)$ REG bundles in the X REG bundles are $\{j, j+1, \dots, j+(X-Y-1)\}$; and

i and j meet at least one of the following cases:

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=8$ and $C=16$, when $X=8$, $A=16$ and $C=8$, when $X=8$, $A=8$, $B=20$, and $C=4$, when $X=4$, $A=8$, $B=20$, and $C=2$, when $X=4$, $A=10$, $B=22$, and $C=2$, when $X=4$, $A=8$, $B=22$, and $C=2$, when $X=4$, $A=10$, $B=20$, and $C=2$, when $X=20$, $A=4$ and $C=20$, when $X=22$, $A=2$ and $C=22$, and/or when $X=24$, $A=2$, $B=26$, and $C=22$;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=0$ and $C=16$, when $X=12$, $A=4$ and $C=12$, when $X=8$, $A=8$ and $C=8$, when $X=8$, $A=4$, $B=12$, and $C=4$, when $X=4$, $A=12$, 4, or 8, and $C=4$, when $X=4$, $A=10$, $B=14$, and $C=2$, and/or when $X=4$, $A=6$, $B=14$, and $C=2$;

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , $n=nCellID$, $nCellID$ indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=8$, $A=6$, $B=8$, and $C=2$, when $X=6$, $A=6$, $B=10$, and $C=2$, and/or when $X=4$, $A=6$, $B=12$, and $C=2$;

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=12$, $A=0$ and $C=12$, when $X=8$, $A=4$ and $C=8$, when $X=4$, $A=8$ and $C=4$, and/or when $X=4$, $A=4$ and $C=4$;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 48, and the bandwidth supported by the first terminal device is less than the bandwidth corresponding to the N resource blocks and is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , $n=nCellID$, $nCellID$ indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=8$, $A=0$ and $C=8$, when $X=6$, $A=2$ and $C=6$, and/or when $X=4$, $A=4$ and $C=4$; and

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 48,

and the bandwidth supported by the first terminal device is less than the bandwidth corresponding to the N resource blocks and is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , $n=n_{\text{CellID}}$, n_{CellID} indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=2$, $A=2$ and $C=2$.

7. The method according to any one of claims 1 to 3, wherein

indexes of Y CCE resources in X CCE resources corresponding to the AL that is supported by the first terminal device and that is equal to X are $\{i, i+1, \dots, i+(Y-1)\}$, and indexes of $(X-Y)$ CCE resources in the X CCE resources are $\{j, j+1, \dots, j+(X-Y-1)\}$; and

i and j meet at least one of the following cases:

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(16+T+A)\bmod W/2$, $j=(32+T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=0$ and $C=16$, when $X=8$, $A=0$, $B=0$, and $C=0$, when $X=8$, $A=0$, $B=8$, and $C=4$, when $X=4$, $A=0$, $B=8$, and $C=2$, when $X=4$, $A=4$, $B=10$, and $C=2$, when $X=4$, $A=0$, $B=10$, and $C=2$, when $X=4$, $A=4$, $B=8$, and $C=2$, when $X=20$, $A=-8$ and $C=8$, when $X=22$, $A=-12$ and $C=10$, and/or when $X=24$, $A=-12$, $B=5$, and $C=22$;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(8+T+A)\bmod W/2$, $j=(24+T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=-8$ and $C=16$,

when $X=12$, $A=0$ and $C=12$, when $X=8$, $A=8$ and $C=8$, when $X=8$, $A=0$, $B=0$, and $C=4$, when $X=4$, $A=0$, 8 , or 16 , and $C=4$, when $X=4$, $A=12$, $B=4$, and $C=2$, and/or when $X=4$, $A=-4$, $B=4$, and $C=2$;

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(12+T+A)\bmod W/2$, $j=(9-T+B)\bmod W/2$, $Y=C$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=8$, $A=0$, $B=-8$, and $C=2$, when $X=6$, $A=0$, $B=-4$, and $C=2$, and/or when $X=4$, $A=0$, $B=0$, and $C=2$;

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(8+T+A)\bmod W/2$, $j=(16+T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=12$, $A=0$ and $C=12$, when $X=8$, $A=8$ and $C=8$, when $X=4$, $A=16$ and $C=4$, and/or when $X=4$, $A=8$ and $C=4$;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(0+T+A)\bmod W/2$, $Y=C$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=8$, $A=0$ and $C=8$, when $X=6$, $A=4$ and $C=6$, and/or when $X=4$, $A=8$ and $C=4$; and

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth

corresponding to the $N/2$ resource blocks, $i=(4+T+A)\bmod W/2$, $Y=C$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, or when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=2$, $A=4$ and $C=2$.

8. The method according to claim 4 or 6, wherein

the resource indexes $\{i, i+1, \dots, i+(Y-1)\}$ of the Y REG bundles in the X REG bundles corresponding to the AL that is supported by the first terminal device and that is equal to X are $d1i+e$ and $d1i+f+E$ after offset, the resource indexes $\{j, j+1, \dots, j+(X-Y-1)\}$ of the $(X-Y)$ REG bundles are $d2i+p$ and $d2i+q+P$ after offset, $e=0, 1, \dots, \text{or } E$, $f=0, 1, \dots, \text{or } F$, $E+F=Y$, $p=0, 1, \dots, \text{or } P$, $q=0, 1, \dots, \text{or } Q$, and $P+Q=X-Y$;

when $j+(X-Y-1)<W/2$, $d1i+e=i+e$, $d1i+f+E=i+f+E$, $d2i+p=j+p$, and $d2i+q+P=j+q+P$, or $d1i+e=i+e+W/2$, $d1i+f+E=i+f+E+W/2$, $d2i+p=j+p+W/2$, and $d2i+q+P=j+q+P+W/2$;

when $j<W/2 \leq j+(X-Y-1)$, $d1i+e=i+e$, $d1i+f+E=i+f+E$, $d2i+p=j+p$, $d2i+q+P=j+q+P-W/2$, $d1i+e=i+e+W/2$, $d1i+f+E=i+f+E+W/2$, $d2i+p=j+p+W/2$, $d2i+q+P=j+q+P$, and $P=W/2-1-j$;

when $i+(Y-1)<W/2 \leq j$, $d1i+e=i+e$, $d1i+f+E=i+f+E$, $d2i+p=j+p-W/2$, $d2i+q+P=j+q+P-W/2$, $d1i+e=i+e+W/2$, $d1i+f+E=i+f+E+W/2$, $d2i+p=j+p$, and $d2i+q+P=j+q+P$;

when $i<W/2 \leq i+(Y-1)$, $d1i+e=i+e$, $d1i+f+E=i+f+E-W/2$, $d2i+p=j+p-W/2$, $d2i+q+P=j+q+P-W/2$, $d1i+e=i+e+W/2$, $d1i+f+E=i+f+E$, $d2i+p=j+p$, $d2i+q+P=j+q+P$, and $E=W/2-1-j$; and

when $i \geq W/2$, $d1i+e=i+e-W/2$, $d1i+f+E=i+f+E-W/2$, $d2i+p=j+p-W/2$, $d2i+q+P=j+q+P-W/2$, $d1i+e=i+e$, $d1i+f+E=i+f+E$, $d2i+p=j+p$, and $d2i+q+P=j+q+P$.

9. The method according to any one of claims 1 to 8, wherein the method further comprises:

receiving, by the first terminal device, control information on R REG bundles, wherein the R REG bundles do not overlap with S REG bundles, and the S REG bundles are used by the second terminal device to receive the control information.

10. A communication method, comprising:

determining, by a network device, a first control resource set for a first terminal device, wherein a quantity of resource blocks in the first control resource set is N , a quantity of resource element group bundles REG bundles in the first control resource set is W , a bandwidth supported by the first terminal device is less than a bandwidth corresponding to the N resource blocks, the

bandwidth supported by the first terminal device is less than a bandwidth supported by a second terminal device, N and W are positive integers; and an aggregation level AL supported by the first terminal device comprises X , and an AL supported by the second terminal device does not comprise X , and/or a quantity of candidate control channels supported by the first terminal device in a first search space SS set is Y , a quantity of candidate control channels supported by the second terminal device in the first search space set is Z , and Y is less than or equal to Z ;

sending, by the network device, first information to the first terminal device, wherein the first information indicates the first control resource set; and

sending, by the network device, a first control channel on M REG bundles in the W REG bundles or on M control channel element CCE resources corresponding to the M REG bundles, wherein M is less than W .

11. The method according to claim 10, wherein X comprises at least one of the following values: 6, 12, 20, and 22.

12. The method according to any one of claims 10 and 11, wherein

when a quantity l of symbols in the first control resource set is equal to 3, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/2$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 20 is 1, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 16 is 1, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 8 is 1 or 2, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 2 or 3, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 22 is 1;

when a quantity l of symbols in the first control resource set is equal to 2, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/2$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 16 is 1, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 12 is 1, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 8 is 1 or 2, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 2 or 3;

when a quantity l of symbols in the first control resource set is equal to 1, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/2$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 6 is 1, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1;

when a quantity l of symbols in the first control resource set is equal to 3, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/2$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 8 is 1, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1;

when a quantity l of symbols in the first control resource set is equal to 2, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/2$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 6 is 1, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1;

when a quantity l of symbols in the first control resource set is equal to 1, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/2$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 2 is 1;

when a quantity l of symbols in the first control resource set is equal to 3, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/4$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 12 is 1, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 8 is 1, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1 or 2;

when a quantity l of symbols in the first control resource set is equal to 2, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/4$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 8 is 1, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1;

when a quantity l of symbols in the first control resource set is equal to 1, N is equal to 96,

and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/4$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1;

when a quantity l of symbols in the first control resource set is equal to 3, N is equal to 48,
5 and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/4$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 6 is 1, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1;

when a quantity l of symbols in the first control resource set is equal to 2, N is equal to 48,
10 and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/4$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1; or

when a quantity l of symbols in the first control resource set is equal to 1, N is equal to 48,
and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth
15 corresponding to $N/4$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 2 is 1.

13. The method according to any one of claims 10 to 12, wherein

indexes of Y REG bundles in X REG bundles corresponding to the AL that is supported by the first terminal device and that is equal to X are $\{i, i+1, \dots, i+(Y-1)\}$, indexes of remaining $(X-Y)$
20 REG bundles in the X REG bundles are $\{j, j+1, \dots, j+(X-Y-1)\}$, and i and j are positive integers; and

i and j meet at least one of the following cases:

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 96,
and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth
25 corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=16$, $B=32$, and $C=8$, when $X=8$, $A=20$, $B=32$, and $C=4$, when $X=8$, $A=16$, $B=36$, and $C=4$, when $X=4$, $A=16$, $B=34$, and $C=2$, when
30 $X=4$, $A=20$, $B=34$, and $C=2$, when $X=4$, $A=20$, $B=32$, and $C=2$, when $X=4$, $A=22$, $B=34$, and $C=2$, when $X=20$, $A=16$, $B=28$, and $C=8$, when $X=22$, $A=16$, $B=32$, and $C=8$, and/or when $X=24$, $A=16$,

B=28, and C=8;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=12$, $B=16$, and $C=4$, when $X=12$, $A=12$, $B=20$, and $C=4$, when $X=8$, $A=12$, $B=24$, and $C=4$, when $X=8$, $A=12$, $B=20$, and $C=4$, when $X=4$, $A=12$, $B=20$, and $C=2$, when $X=4$, $A=14$, $B=22$, and $C=2$, and/or when $X=8$ and $Y=8$, indexes of eight REG bundles are i , $i=0, 1, 2, \dots, \text{or } 7$, $i=(n+A)\bmod W/2$, and $A=\{14,15,18,19,22,23,26,27\}$;

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=8$, $A=6$, $B=8$, and $C=2$, when $X=6$, $A=6$, $B=10$, and $C=2$, and/or when $X=4$, $A=6$, $B=12$, and $C=2$;

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=12$, $A=8$, $B=12$, and $C=4$, when $X=8$, $A=8$, $B=16$, and $C=4$, when $X=4$, $A=8$ and $C=4$, and/or when $X=4$, $A=8$, $B=18$, and $C=2$;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=8$, $A=6$, $B=8$, and $C=2$, when $X=6$, $A=6$,

B=10, and C=2, and/or when X=4, A=6, B=12, and C=2; and

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=2$, $A=2$ and $C=2$.

14. The method according to any one of claims 10 to 12, wherein

indexes of Y CCE resources in X CCE resources corresponding to the AL that is supported by the first terminal device and that is equal to X are $\{i, i+1, \dots, i+(Y-1)\}$, and indexes of $(X-Y)$ CCE resources in the X CCE resources are $\{j, j+1, \dots, j+(X-Y-1)\}$; and

i and j meet at least one of the following cases:

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(32+T+A)\bmod W/2$, $j=(17-T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=0$, $B=0$, and $C=8$, when $X=8$, $A=8$, $B=0$, and $C=4$, when $X=8$, $A=0$, $B=8$, and $C=4$, when $X=4$, $A=0$, $B=4$, and $C=2$, when $X=4$, $A=8$, $B=4$, and $C=2$, when $X=4$, $A=8$, $B=0$, and $C=2$, when $X=4$, $A=12$, $B=4$, and $C=2$, when $X=20$, $A=0$, $B=-8$, and $C=8$, when $X=22$, $A=0$, $B=0$, and $C=8$, and/or when $X=24$, $A=0$, $B=-8$, and $C=8$;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(24+T+A)\bmod W/2$, $j=(17-T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=0$, $B=-16$, and $C=4$, when $X=12$, $A=0$, $B=-8$, and $C=4$, when $X=8$,

A=0, B=0, and C=4, when X=8, A=0, B=-8, and C=4, when X=4, A=0, B=-8, and C=2, when X=4, A=4, B=-4, and C=2, and/or when X=8 and Y=8, indexes of eight CCE resources are i , $i=0, 1, 2, 3, 4, \dots, \text{or } 7$, when $i=0$ or 1 , $i=(A+T)\bmod W/2$, and $A=\{28,30\}$, when $i=2, 3, 4, \dots, \text{or } 7$, $i=(A-T)\bmod W/2$, and $A=\{5,7,13,15,21,23\}$, and when $n \bmod W$ belongs to $\{2^{l-u}$ to $(2^{l-u}+W/2-1)\}$, $T=1$, or when $n \bmod W$ does not belong to $\{2^{l-u}$ to $(2^{l-u}+W/2-1)\}$, $T=0$;

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(12+T+A)\bmod W/2$, $j=(9-T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when X=8, A=0, B=-8, and C=2, when X=6, A=0, B=-4, and C=2, and/or when X=4, A=0, B=0, and C=2;

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(16+T+A)\bmod W/2$, $j=(9-T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when X=12, A=0, B=-8, and C=4, when X=8, A=0, B=0, and C=4, when X=4, A=0 and C=4, and/or when X=4, A=0, B=4, and C=2;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(12+T+A)\bmod W/2$, $j=(9-T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first

terminal device is located, mod indicates a modulo operation, and when $X=8$, $A=0$, $B=-8$, and $C=2$, when $X=6$, $A=0$, $B=-4$, and $C=2$, and/or when $X=4$, $A=0$, $B=0$, and $C=2$; and

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(4+T+A)\bmod W/2$, $j=(5-T+B)\bmod W/2$, $Y=C$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, mod indicates a modulo operation, and when $X=2$, $A=0$ and $C=2$.

15. The method according to any one of claims 10 to 12, wherein

resource indexes of Y REG bundles in X REG bundles corresponding to the AL that is supported by the first terminal device and that is equal to X are $\{i, i+1, \dots, i+(Y-1)\}$, and indexes of remaining $(X-Y)$ REG bundles in the X REG bundles are $\{j, j+1, \dots, j+(X-Y-1)\}$; and

i and j meet at least one of the following cases:

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, mod indicates a modulo operation, and when $X=16$, $A=8$ and $C=16$, when $X=8$, $A=16$ and $C=8$, when $X=8$, $A=8$, $B=20$, and $C=4$, when $X=4$, $A=8$, $B=20$, and $C=2$, when $X=4$, $A=10$, $B=22$, and $C=2$, when $X=4$, $A=8$, $B=22$, and $C=2$, when $X=4$, $A=10$, $B=20$, and $C=2$, when $X=20$, $A=4$ and $C=20$, when $X=22$, $A=2$ and $C=22$, and/or when $X=24$, $A=2$, $B=26$, and $C=22$;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, mod indicates a modulo operation, and when $X=16$, $A=0$ and $C=16$, when $X=12$, $A=4$ and $C=12$, when $X=8$, $A=8$ and $C=8$, when $X=8$, $A=4$, $B=12$, and $C=4$, when $X=4$, $A=12$, 4, or 8, and

C=4, when X=4, A=10, B=14, and C=2, and/or when X=4, A=6, B=14, and C=2;

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , $n=nCellID$, $nCellID$ indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=8$, $A=6$, $B=8$, and $C=2$, when $X=6$, $A=6$, $B=10$, and $C=2$, and/or when $X=4$, $A=6$, $B=12$, and $C=2$;

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=12$, $A=0$ and $C=12$, when $X=8$, $A=4$ and $C=8$, when $X=4$, $A=8$ and $C=4$, and/or when $X=4$, $A=4$ and $C=4$;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 48, and the bandwidth supported by the first terminal device is less than the bandwidth corresponding to the N resource blocks and is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , $n=nCellID$, $nCellID$ indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=8$, $A=0$ and $C=8$, when $X=6$, $A=2$ and $C=6$, and/or when $X=4$, $A=4$ and $C=4$; and

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 48, and the bandwidth supported by the first terminal device is less than the bandwidth corresponding to the N resource blocks and is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , $n=nCellID$, $nCellID$ indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=2$, $A=2$ and $C=2$.

16. The method according to any one of claims 10 to 12, wherein

indexes of Y CCE resources in X CCE resources corresponding to the AL that is supported by the first terminal device and that is equal to X are $\{i, i+1, \dots, i+(Y-1)\}$, and indexes of $(X-Y)$ CCE resources in the X CCE resources are $\{j, j+1, \dots, j+(X-Y-1)\}$; and

j meet at least one of the following cases:

5 when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the N/2 resource blocks, $i=(16+T+A)\bmod W/2$, $j=(32+T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a
10 quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C, n indicates an identifier of a cell in which the first terminal device is located, mod indicates a modulo operation, and when $X=16$, $A=0$ and $C=16$, when $X=8$, $A=0$, $B=0$, and $C=0$, when $X=8$, $A=0$, $B=8$, and $C=4$, when $X=4$, $A=0$, $B=8$, and $C=2$, when $X=4$, $A=4$, $B=10$, and $C=2$, when $X=4$, $A=0$, $B=10$, and $C=2$, when $X=4$, $A=4$, $B=8$, and
15 $C=2$, when $X=20$, $A=-8$ and $C=8$, when $X=22$, $A=-12$ and $C=10$, and/or when $X=24$, $A=-12$, $B=5$, and $C=22$;

 when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the N/2 resource blocks, $i=(8+T+A)\bmod W/2$, $j=(24+T+B)\bmod W/2$, when a
20 result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C, n indicates an identifier of a cell in which the first terminal device is located, mod indicates a modulo operation, and when $X=16$, $A=-8$ and $C=16$,
25 when $X=12$, $A=0$ and $C=12$, when $X=8$, $A=8$ and $C=8$, when $X=8$, $A=0$, $B=0$, and $C=4$, when $X=4$, $A=0$, 8, or 16, and $C=4$, when $X=4$, $A=12$, $B=4$, and $C=2$, and/or when $X=4$, $A=-4$, $B=4$, and $C=2$;

 when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the N/2 resource blocks, $i=(12+T+A)\bmod W/2$, $j=(9-T+B)\bmod W/2$, $Y=C$, when
30 a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a

quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, mod indicates a modulo operation, and when $X=8$, $A=0$, $B=-8$, and $C=2$, when $X=6$, $A=0$, $B=-4$, and $C=2$, and/or when $X=4$, $A=0$, $B=0$, and $C=2$;

5 when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(8+T+A)\text{mod } W/2$, $j=(16+T+B)\text{mod } W/2$, when a result obtained from $n \text{ mod } W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \text{ mod } W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a
10 quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, mod indicates a modulo operation, and when $X=12$, $A=0$ and $C=12$, when $X=8$, $A=8$ and $C=8$, when $X=4$, $A=16$ and $C=4$, and/or when $X=4$, $A=8$ and $C=4$;

 when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 48,
15 and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(0+T+A)\text{mod } W/2$, $Y=C$, when a result obtained from $n \text{ mod } W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \text{ mod } W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is
20 equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, mod indicates a modulo operation, and when $X=8$, $A=0$ and $C=8$, when $X=6$, $A=4$ and $C=6$, and/or when $X=4$, $A=8$ and $C=4$; and

 when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth
25 corresponding to the $N/2$ resource blocks, $i=(4+T+A)\text{mod } W/2$, $Y=C$, when a result obtained from $n \text{ mod } W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, or when a result obtained from $n \text{ mod } W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is
30 equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, mod indicates a modulo operation, and when $X=2$, $A=4$ and $C=2$.

17. The method according to claim 13 or 15, wherein

the resource indexes $\{i, i+1, \dots, i+(Y-1)\}$ of the Y REG bundles in the X REG bundles corresponding to the AL that is supported by the first terminal device and that is equal to X are $d1i+e$ and $d1i+f+E$ after offset, the resource indexes $\{j, j+1, \dots, j+(X-Y-1)\}$ of the (X-Y) REG bundles are $d2i+p$ and $d2i+q+P$ after offset, $e=0, 1, \dots, \text{or } E$, $f=0, 1, \dots, \text{or } F$, $E+F=Y$, $p=0, 1, \dots, \text{or } P$, $q=0, 1, \dots, \text{or } Q$, and $P+Q=X-Y$;

when $j+(X-Y-1) < W/2$, $d1i+e=i+e$, $d1i+f+E=i+f+E$, $d2i+p=j+p$, and $d2i+q+P=j+q+P$, or $d1i+e=i+e+W/2$, $d1i+f+E=i+f+E+W/2$, $d2i+p=j+p+W/2$, and $d2i+q+P=j+q+P+W/2$;

when $j < W/2 \leq j+(X-Y-1)$, $d1i+e=i+e$, $d1i+f+E=i+f+E$, $d2i+p=j+p$, $d2i+q+P=j+q+P-W/2$, $d1i+e=i+e+W/2$, $d1i+f+E=i+f+E+W/2$, $d2i+p=j+p+W/2$, $d2i+q+P=j+q+P$, and $P=W/2-1-j$;

when $i+(Y-1) < W/2 \leq j$, $d1i+e=i+e$, $d1i+f+E=i+f+E$, $d2i+p=j+p-W/2$, $d2i+q+P=j+q+P-W/2$, $d1i+e=i+e+W/2$, $d1i+f+E=i+f+E+W/2$, $d2i+p=j+p$, and $d2i+q+P=j+q+P$;

when $i < W/2 \leq i+(Y-1)$, $d1i+e=i+e$, $d1i+f+E=i+f+E-W/2$, $d2i+p=j+p-W/2$, $d2i+q+P=j+q+P-W/2$, $d1i+e=i+e+W/2$, $d1i+f+E=i+f+E$, $d2i+p=j+p$, $d2i+q+P=j+q+P$, and $E=W/2-1-j$; and

when $i \geq W/2$, $d1i+e=i+e-W/2$, $d1i+f+E=i+f+E-W/2$, $d2i+p=j+p-W/2$, $d2i+q+P=j+q+P-W/2$, $d1i+e=i+e$, $d1i+f+E=i+f+E$, $d2i+p=j+p$, and $d2i+q+P=j+q+P$.

18. The method according to any one of claims 10 to 17, wherein the method further comprises:

sending, by the network device, control information to the first terminal device on R REG bundles, and the control information to the second terminal device on S REG bundles, wherein the R REG bundles do not overlap with the S REG bundles.

19. A communication apparatus, wherein the communication apparatus comprises a first terminal device, and the first terminal device comprises:

a transceiver module, configured to receive first information from a network device, wherein the first information indicates a first control resource set, a quantity of resource blocks in the first control resource set is N, a quantity of resource element group bundles REG bundles in the first control resource set is W, a bandwidth supported by the first terminal device is less than a bandwidth corresponding to the N resource blocks, the bandwidth supported by the first terminal device is less than a bandwidth supported by a second terminal device, N and W are positive integers; and an aggregation level AL supported by the first terminal device comprises X, and an AL supported by the second terminal device does not comprise X, and/or a quantity of candidate control channels supported by the first terminal device in a first search space SS set is Y1, a

quantity of candidate control channels supported by the second terminal device in the first search space set is Z , and $Y1$ is less than or equal to Z ; and

a processing module, configured to monitor a first control channel on M REG bundles in the W REG bundles or on M control channel element CCE resources corresponding to the M REG bundles, wherein M is less than W .

~~20. The apparatus according to claim 19, wherein X comprises at least one of the following values: 6, 12, 20, and 22.~~

~~21. The apparatus according to any one of claims 19 and 20, wherein~~

~~when a quantity l of symbols in the first control resource set is equal to 3, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/2$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 20 is 1, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 16 is 1, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 8 is 1 or 2, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 2 or 3, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 22 is 1;~~

~~when a quantity l of symbols in the first control resource set is equal to 2, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/2$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 16 is 1, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 12 is 1, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 8 is 1 or 2, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 2 or 3;~~

~~when a quantity l of symbols in the first control resource set is equal to 1, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/2$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 6 is 1, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1;~~

~~when a quantity l of symbols in the first control resource set is equal to 3, N is equal to 48,~~

and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/2$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 8 is 1, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1;

5 when a quantity l of symbols in the first control resource set is equal to 2, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/2$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 6 is 1, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1;

10 when a quantity l of symbols in the first control resource set is equal to 1, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/2$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 2 is 1;

15 when a quantity l of symbols in the first control resource set is equal to 3, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/4$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 12 is 1, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 8 is 1, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1 or 2;

20 when a quantity l of symbols in the first control resource set is equal to 2, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/4$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 8 is 1, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1;

25 when a quantity l of symbols in the first control resource set is equal to 1, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/4$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1;

30 when a quantity l of symbols in the first control resource set is equal to 3, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/4$ resource blocks, a quantity of candidate control channels whose AL

supported by the first terminal device is equal to 6 is 1, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1;

when a quantity l of symbols in the first control resource set is equal to 2, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/4$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1; or

when a quantity l of symbols in the first control resource set is equal to 1, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/4$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 2 is 1.

22. The apparatus according to any one of claims 19 to 21, wherein

indexes of Y REG bundles in X REG bundles corresponding to the AL that is supported by the first terminal device and that is equal to X are $\{i, i+1, \dots, i+(Y-1)\}$, indexes of remaining $(X-Y)$ REG bundles in the X REG bundles are $\{j, j+1, \dots, j+(X-Y-1)\}$, and i and j are positive integers;

and

i and j meet at least one of the following cases:

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=16$, $B=32$, and $C=8$, when $X=8$, $A=20$, $B=32$, and $C=4$, when $X=8$, $A=16$, $B=36$, and $C=4$, when $X=4$, $A=16$, $B=34$, and $C=2$, when $X=4$, $A=20$, $B=34$, and $C=2$, when $X=4$, $A=20$, $B=32$, and $C=2$, when $X=4$, $A=22$, $B=34$, and $C=2$, when $X=20$, $A=16$, $B=28$, and $C=8$, when $X=22$, $A=16$, $B=32$, and $C=8$, and/or when $X=24$, $A=16$, $B=28$, and $C=8$;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is

located, mod indicates a modulo operation, and when $X=16$, $A=12$, $B=16$, and $C=4$, when $X=12$,
A=12, B=20, and C=4, when $X=8$, A=12, B=24, and C=4, when $X=8$, A=12, B=20, and C=4, when
X=4, A=12, B=20, and C=2, when $X=4$, A=14, B=22, and C=2, and/or when $X=8$ and $Y=8$,
indexes of eight REG bundles are i , $i=0, 1, 2, \dots, \text{or } 7$, $i=(n+A)\bmod W/2$, and
5 $A=\{14,15,18,19,22,23,26,27\}$;

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 96,
and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth
corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of
candidate control channels corresponding to the AL that is supported by the first terminal device
10 and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is
located, mod indicates a modulo operation, and when $X=8$, $A=6$, $B=8$, and $C=2$, when $X=6$, $A=6$,
B=10, and $C=2$, and/or when $X=4$, $A=6$, $B=12$, and $C=2$;

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 48,
and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth
15 corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of
candidate control channels corresponding to the AL that is supported by the first terminal device
and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is
located, mod indicates a modulo operation, and when $X=12$, $A=8$, $B=12$, and $C=4$, when $X=8$,
A=8, B=16, and $C=4$, when $X=4$, A=8 and $C=4$, and/or when $X=4$, A=8, B=18, and $C=2$;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 48,
and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth
corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of
candidate control channels corresponding to the AL that is supported by the first terminal device
and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is
25 located, mod indicates a modulo operation, and when $X=8$, $A=6$, $B=8$, and $C=2$, when $X=6$, $A=6$,
B=10, and $C=2$, and/or when $X=4$, $A=6$, $B=12$, and $C=2$; and

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 48,
and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth
corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, a quantity of candidate control
30 channels corresponding to the AL that is supported by the first terminal device and that is equal to
 X is C , n indicates an identifier of a cell in which the first terminal device is located, mod indicates

a modulo operation, and when $X=2$, $A=2$ and $C=2$.

23. The apparatus according to any one of claims 19 to 21, wherein

indexes of Y CCE resources in X CCE resources corresponding to the AL that is supported by the first terminal device and that is equal to X are $\{i, i+1, \dots, i+(Y-1)\}$, and indexes of $(X-Y)$

5 CCE resources in the X CCE resources are $\{j, j+1, \dots, j+(X-Y-1)\}$; and

i and j meet at least one of the following cases:

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(32+T+A)\bmod W/2$, $j=(17-T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=0$, $B=0$, and $C=8$, when $X=8$, $A=8$, $B=0$, and $C=4$, when $X=8$, $A=0$, $B=8$, and $C=4$, when $X=4$, $A=0$, $B=4$, and $C=2$, when $X=4$, $A=8$, $B=4$, and $C=2$, when $X=4$, $A=8$, $B=0$, and $C=2$, when $X=4$, $A=12$, $B=4$, and $C=2$, when $X=20$, $A=0$, $B=8$, and $C=8$, when $X=22$, $A=0$, $B=0$, and $C=8$, and/or when $X=24$, $A=0$, $B=8$, and $C=8$;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(24+T+A)\bmod W/2$, $j=(17-T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=0$, $B=16$, and $C=4$, when $X=12$, $A=0$, $B=8$, and $C=4$, when $X=8$, $A=0$, $B=0$, and $C=4$, when $X=8$, $A=0$, $B=8$, and $C=4$, when $X=4$, $A=0$, $B=8$, and $C=2$, when $X=4$, $A=4$, $B=4$, and $C=2$, and/or when $X=8$ and $Y=8$, indexes of eight CCE resources are i , $i=0, 1, 2, 3, 4, \dots$, or 7 , when $i=0$ or 1 , $i=(A+T)\bmod W/2$, and $A=\{28, 30\}$, when $i=2, 3, 4, \dots$, or 7 , $i=(A-T)\bmod W/2$, and $A=\{5, 7, 13, 15, 21, 23\}$, and when $n \bmod W$ belongs to $\{2^{l-u} \text{ to } (2^{l-u}+W/2-1)\}$, $T=1$, or when $n \bmod W$ does not belong to $\{2^{l-u} \text{ to } (2^{l-u}+W/2-1)\}$, $T=0$;

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 96,

and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(12+T+A)\bmod W/2$, $j=(9-T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=8$, $A=0$, $B=8$, and $C=2$, when $X=6$, $A=0$, $B=4$, and $C=2$, and/or when $X=4$, $A=0$, $B=0$, and $C=2$;

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(16+T+A)\bmod W/2$, $j=(9-T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=12$, $A=0$, $B=8$, and $C=4$, when $X=8$, $A=0$, $B=0$, and $C=4$, when $X=4$, $A=0$ and $C=4$, and/or when $X=4$, $A=0$, $B=4$, and $C=2$;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(12+T+A)\bmod W/2$, $j=(9-T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=8$, $A=0$, $B=8$, and $C=2$, when $X=6$, $A=0$, $B=4$, and $C=2$, and/or when $X=4$, $A=0$, $B=0$, and $C=2$; and

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(4+T+A)\bmod W/2$, $j=(5-T+B)\bmod W/2$, $Y=C$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-$

1, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{1-u} or greater than $2^{1-u} + W/2 - 1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=2$, $A=0$ and $C=2$.

24. The apparatus according to any one of claims 19 to 21, wherein

resource indexes of Y REG bundles in X REG bundles corresponding to the AL that is supported by the first terminal device and that is equal to X are $\{i, i+1, \dots, i+(Y-1)\}$, and indexes of remaining $(X-Y)$ REG bundles in the X REG bundles are $\{j, j+1, \dots, j+(X-Y-1)\}$; and

i and j meet at least one of the following cases:

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A) \bmod W/2$, $j=(n+B) \bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=8$ and $C=16$, when $X=8$, $A=16$ and $C=8$, when $X=8$, $A=8$, $B=20$, and $C=4$, when $X=4$, $A=8$, $B=20$, and $C=2$, when $X=4$, $A=10$, $B=22$, and $C=2$, when $X=4$, $A=8$, $B=22$, and $C=2$, when $X=4$, $A=10$, $B=20$, and $C=2$, when $X=20$, $A=4$ and $C=20$, when $X=22$, $A=2$ and $C=22$, and/or when $X=24$, $A=2$, $B=26$, and $C=22$;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A) \bmod W/2$, $j=(n+B) \bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=0$ and $C=16$, when $X=12$, $A=4$ and $C=12$, when $X=8$, $A=8$ and $C=8$, when $X=8$, $A=4$, $B=12$, and $C=4$, when $X=4$, $A=12$, 4, or 8, and $C=4$, when $X=4$, $A=10$, $B=14$, and $C=2$, and/or when $X=4$, $A=6$, $B=14$, and $C=2$;

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A) \bmod W/2$, $j=(n+B) \bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , $n=nCellID$, $nCellID$ indicates an identifier of a cell in which the first

terminal device is located, mod indicates a modulo operation, and when $X=8$, $A=6$, $B=8$, and $C=2$, when $X=6$, $A=6$, $B=10$, and $C=2$, and/or when $X=4$, $A=6$, $B=12$, and $C=2$;

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, mod indicates a modulo operation, and when $X=12$, $A=0$ and $C=12$, when $X=8$, $A=4$ and $C=8$, when $X=4$, $A=8$ and $C=4$, and/or when $X=4$, $A=4$ and $C=4$;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 48, and the bandwidth supported by the first terminal device is less than the bandwidth corresponding to the N resource blocks and is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , $n=nCellID$, $nCellID$ indicates an identifier of a cell in which the first terminal device is located, mod indicates a modulo operation, and when $X=8$, $A=0$ and $C=8$, when $X=6$, $A=2$ and $C=6$, and/or when $X=4$, $A=4$ and $C=4$; and

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 48, and the bandwidth supported by the first terminal device is less than the bandwidth corresponding to the N resource blocks and is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , $n=nCellID$, $nCellID$ indicates an identifier of a cell in which the first terminal device is located, mod indicates a modulo operation, and when $X=2$, $A=2$ and $C=2$.

25. The apparatus according to any one of claims 19 to 21, wherein

indexes of Y CCE resources in X CCE resources corresponding to the AL that is supported by the first terminal device and that is equal to X are $\{i, i+1, \dots, i+(Y-1)\}$, and indexes of $(X-Y)$ CCE resources in the X CCE resources are $\{j, j+1, \dots, j+(X-Y-1)\}$; and

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(16+T+A)\bmod W/2$, $j=(32+T+B)\bmod W/2$, when a

result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u} + W/2 - 1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u} + W/2 - 1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=0$ and $C=16$, when $X=8$, $A=0$, $B=0$, and $C=0$, when $X=8$, $A=0$, $B=8$, and $C=4$, when $X=4$, $A=0$, $B=8$, and $C=2$, when $X=4$, $A=4$, $B=10$, and $C=2$, when $X=4$, $A=0$, $B=10$, and $C=2$, when $X=4$, $A=4$, $B=8$, and $C=2$, when $X=20$, $A=8$ and $C=8$, when $X=22$, $A=12$ and $C=10$, and/or when $X=24$, $A=12$, $B=5$, and $C=22$;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(8+T+A) \bmod W/2$, $j=(24+T+B) \bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u} + W/2 - 1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u} + W/2 - 1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=8$ and $C=16$, when $X=12$, $A=0$ and $C=12$, when $X=8$, $A=8$ and $C=8$, when $X=8$, $A=0$, $B=0$, and $C=4$, when $X=4$, $A=0$, $B=8$, or 16 , and $C=4$, when $X=4$, $A=12$, $B=4$, and $C=2$, and/or when $X=4$, $A=4$, $B=4$, and $C=2$;

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(12+T+A) \bmod W/2$, $j=(9-T+B) \bmod W/2$, $Y=C$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u} + W/2 - 1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u} + W/2 - 1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=8$, $A=0$, $B=8$, and $C=2$, when $X=6$, $A=0$, $B=4$, and $C=2$, and/or when $X=4$, $A=0$, $B=0$, and $C=2$;

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(8+T+A) \bmod W/2$, $j=(16+T+B) \bmod W/2$, when a

result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u} + W/2 - 1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u} + W/2 - 1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=12$, $A=0$ and $C=12$, when $X=8$, $A=8$ and $C=8$, when $X=4$, $A=16$ and $C=4$, and/or when $X=4$, $A=8$ and $C=4$;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(0+T+A) \bmod W/2$, $Y=C$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u} + W/2 - 1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u} + W/2 - 1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=8$, $A=0$ and $C=8$, when $X=6$, $A=4$ and $C=6$, and/or when $X=4$, $A=8$ and $C=4$; and

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(4+T+A) \bmod W/2$, $Y=C$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u} + W/2 - 1$, $T=1$, or when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u} + W/2 - 1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=2$, $A=4$ and $C=2$.

26. The apparatus according to claim 22 or 24, wherein

the resource indexes $\{i, i+1, \dots, i+(Y-1)\}$ of the Y REG bundles in the X REG bundles corresponding to the AL that is supported by the first terminal device and that is equal to X are $d1i+e$ and $d1i+f+E$ after offset, the resource indexes $\{j, j+1, \dots, j+(X-Y-1)\}$ of the $(X-Y)$ REG bundles are $d2i+p$ and $d2i+q+P$ after offset, $e=0, 1, \dots, \text{or } E$, $f=0, 1, \dots, \text{or } F$, $E+F=Y$, $p=0, 1, \dots, \text{or } P$, $q=0, 1, \dots, \text{or } Q$, and $P+Q=X-Y$;

when $j+(X-Y-1) < W/2$, $d1i+e=i+e$, $d1i+f+E=i+f+E$, $d2i+p=j+p$, and $d2i+q+P=j+q+P$, or $d1i+e=i+e+W/2$, $d1i+f+E=i+f+E+W/2$, $d2i+p=j+p+W/2$, and $d2i+q+P=j+q+P+W/2$;

when $j < W/2 \leq j + (X - Y - 1)$, $d1i + e = i + e$, $d1i + f + E = i + f + E$, $d2i + p = j + p$, $d2i + q + P = j + q + P - W/2$,
 $d1i + e = i + e + W/2$, $d1i + f + E = i + f + E + W/2$, $d2i + p = j + p + W/2$, $d2i + q + P = j + q + P$, and $P = W/2 - 1 - j$;

when $i + (Y - 1) < W/2 \leq j$, $d1i + e = i + e$, $d1i + f + E = i + f + E$, $d2i + p = j + p - W/2$, $d2i + q + P = j + q + P - W/2$,
 $d1i + e = i + e + W/2$, $d1i + f + E = i + f + E + W/2$, $d2i + p = j + p$, and $d2i + q + P = j + q + P$;

5 when $i < W/2 \leq i + (Y - 1)$, $d1i + e = i + e$, $d1i + f + E = i + f + E - W/2$, $d2i + p = j + p - W/2$, $d2i + q + P = j + q + P - W/2$,
 $d1i + e = i + e + W/2$, $d1i + f + E = i + f + E$, $d2i + p = j + p$, $d2i + q + P = j + q + P$, and $E = W/2 - 1 - j$; and

when $i \geq W/2$, $d1i + e = i + e - W/2$, $d1i + f + E = i + f + E - W/2$, $d2i + p = j + p - W/2$, $d2i + q + P = j + q + P - W/2$,
 $d1i + e = i + e$, $d1i + f + E = i + f + E$, $d2i + p = j + p$, and $d2i + q + P = j + q + P$.

10 27. The apparatus according to any one of claims 19 to 26, wherein the transceiver module is further configured to receive control information on R REG bundles, wherein the R REG bundles do not overlap with S REG bundles, and the S REG bundles are used by the second terminal device to receive the control information.

2028. A communication apparatus, wherein the communication apparatus comprises a network device, and the network device comprises:

15 a processing module, configured to determine a first control resource set for a first terminal device, wherein a quantity of resource blocks in the first control resource set is N, a quantity of resource element group bundles REG bundles in the first control resource set is W, a bandwidth supported by the first terminal device is less than a bandwidth corresponding to the N resource blocks, the bandwidth supported by the first terminal device is less than a bandwidth supported by
20 a second terminal device, N and W are positive integers; and an aggregation level AL supported by the first terminal device comprises X, and an AL supported by the second terminal device does not comprise X, and/or a quantity of candidate control channels supported by the first terminal device in a first search space SS set is Y, a quantity of candidate control channels supported by the second terminal device in the first search space set is Z, and Y is less than or equal to Z;

25 a transceiver module, configured to send first information to the first terminal device, wherein the first information indicates the first control resource set, and

the transceiver module is further configured to send a first control channel on M REG bundles in the W REG bundles or on M control channel element CCE resources corresponding to the M REG bundles, wherein M is less than W.

30 29. The apparatus according to claim 28, wherein X comprises at least one of the following values: 6, 12, 20, and 22.

30. The apparatus according to any one of claims 28 and 29, wherein

when a quantity l of symbols in the first control resource set is equal to 3, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/2$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 20 is 1, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 16 is 1, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 8 is 1 or 2, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 2 or 3, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 22 is 1;

when a quantity l of symbols in the first control resource set is equal to 2, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/2$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 16 is 1, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 12 is 1, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 8 is 1 or 2, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 2 or 3;

when a quantity l of symbols in the first control resource set is equal to 1, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/2$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 6 is 1, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1;

when a quantity l of symbols in the first control resource set is equal to 3, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/2$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 8 is 1, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1;

when a quantity l of symbols in the first control resource set is equal to 2, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/2$ resource blocks, a quantity of candidate control channels whose AL

~~supported by the first terminal device is equal to 6 is 1, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1;~~

~~when a quantity l of symbols in the first control resource set is equal to 1, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/2$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 2 is 1;~~

~~when a quantity l of symbols in the first control resource set is equal to 3, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/4$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 12 is 1, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 8 is 1, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1 or 2;~~

~~when a quantity l of symbols in the first control resource set is equal to 2, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/4$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 8 is 1, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1;~~

~~when a quantity l of symbols in the first control resource set is equal to 1, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/4$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1;~~

~~when a quantity l of symbols in the first control resource set is equal to 3, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/4$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 6 is 1, and/or a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1;~~

~~when a quantity l of symbols in the first control resource set is equal to 2, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/4$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 4 is 1; or~~

~~when a quantity l of symbols in the first control resource set is equal to 1, N is equal to 48,~~

and the bandwidth supported by the first terminal device is greater than or equal to a bandwidth corresponding to $N/4$ resource blocks, a quantity of candidate control channels whose AL supported by the first terminal device is equal to 2 is 1.

31. The apparatus according to any one of claims 28 to 30, wherein

indexes of Y REG bundles in X REG bundles corresponding to the AL that is supported by the first terminal device and that is equal to X are $\{i, i+1, \dots, i+(Y-1)\}$, indexes of remaining $(X-Y)$ REG bundles in the X REG bundles are $\{j, j+1, \dots, j+(X-Y-1)\}$, and i and j are positive integers; and

i and j meet at least one of the following cases:

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=16$, $B=32$, and $C=8$, when $X=8$, $A=20$, $B=32$, and $C=4$, when $X=8$, $A=16$, $B=36$, and $C=4$, when $X=4$, $A=16$, $B=34$, and $C=2$, when $X=4$, $A=20$, $B=34$, and $C=2$, when $X=4$, $A=20$, $B=32$, and $C=2$, when $X=4$, $A=22$, $B=34$, and $C=2$, when $X=20$, $A=16$, $B=28$, and $C=8$, when $X=22$, $A=16$, $B=32$, and $C=8$, and/or when $X=24$, $A=16$, $B=28$, and $C=8$;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=12$, $B=16$, and $C=4$, when $X=12$, $A=12$, $B=20$, and $C=4$, when $X=8$, $A=12$, $B=24$, and $C=4$, when $X=8$, $A=12$, $B=20$, and $C=4$, when $X=4$, $A=12$, $B=20$, and $C=2$, when $X=4$, $A=14$, $B=22$, and $C=2$, and/or when $X=8$ and $Y=8$, indexes of eight REG bundles are i , $i=0, 1, 2, \dots, \text{or } 7$, $i=(n+A)\bmod W/2$, and $A=\{14, 15, 18, 19, 22, 23, 26, 27\}$;

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth

corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=8$, $A=6$, $B=8$, and $C=2$, when $X=6$, $A=6$, $B=10$, and $C=2$, and/or when $X=4$, $A=6$, $B=12$, and $C=2$;

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=12$, $A=8$, $B=12$, and $C=4$, when $X=8$, $A=8$, $B=16$, and $C=4$, when $X=4$, $A=8$ and $C=4$, and/or when $X=4$, $A=8$, $B=18$, and $C=2$;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=8$, $A=6$, $B=8$, and $C=2$, when $X=6$, $A=6$, $B=10$, and $C=2$, and/or when $X=4$, $A=6$, $B=12$, and $C=2$; and

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=2$, $A=2$ and $C=2$.

32. The apparatus according to any one of claims 28 to 30, wherein

indexes of Y CCE resources in X CCE resources corresponding to the AL that is supported by the first terminal device and that is equal to X are $\{i, i+1, \dots, i+(Y-1)\}$, and indexes of $(X-Y)$ CCE resources in the X CCE resources are $\{j, j+1, \dots, j+(X-Y-1)\}$; and

i and j meet at least one of the following cases:

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 96,

and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(32+T+A)\bmod W/2$, $j=(17-T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{1-u} and less than or equal to $2^{1-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{1-u} or greater than $2^{1-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=0$, $B=0$, and $C=8$, when $X=8$, $A=8$, $B=0$, and $C=4$, when $X=8$, $A=0$, $B=8$, and $C=4$, when $X=4$, $A=0$, $B=4$, and $C=2$, when $X=4$, $A=8$, $B=4$, and $C=2$, when $X=4$, $A=8$, $B=0$, and $C=2$, when $X=4$, $A=12$, $B=4$, and $C=2$, when $X=20$, $A=0$, $B=8$, and $C=8$, when $X=22$, $A=0$, $B=0$, and $C=8$, and/or when $X=24$, $A=0$, $B=8$, and $C=8$;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(24+T+A)\bmod W/2$, $j=(17-T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{1-u} and less than or equal to $2^{1-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{1-u} or greater than $2^{1-u}+W/2-1$, $T=0$, n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=0$, $B=16$, and $C=4$, when $X=12$, $A=0$, $B=8$, and $C=4$, when $X=8$, $A=0$, $B=0$, and $C=4$, when $X=8$, $A=0$, $B=8$, and $C=4$, when $X=4$, $A=0$, $B=8$, and $C=2$, when $X=4$, $A=4$, $B=4$, and $C=2$, and/or when $X=8$ and $Y=8$, indexes of eight CCE resources are i , $i=0$, 1, 2, 3, 4, ..., or 7, when $i=0$ or 1, $i=(A+T)\bmod W/2$, and $A=\{28,30\}$, when $i=2$, 3, 4, ..., or 7, $i=(A-T)\bmod W/2$, and $A=\{5,7,13,15,21,23\}$, and when $n \bmod W$ belongs to $\{2^{1-u}$ to $(2^{1-u}+W/2-1)\}$, $T=1$, or when $n \bmod W$ does not belong to $\{2^{1-u}$ to $(2^{1-u}+W/2-1)\}$, $T=0$;

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(12+T+A)\bmod W/2$, $j=(9-T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{1-u} and less than or equal to $2^{1-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{1-u} or greater than $2^{1-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=8$, $A=0$, $B=8$, and

~~C=2, when X=6, A=0, B= 4, and C=2, and/or when X=4, A=0, B=0, and C=2;~~

~~when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the N/2 resource blocks, $i=(16+T+A)\bmod W/2$, $j=(9-T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, T=1, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, T=0, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C, n indicates an identifier of a cell in which the first terminal device is located, mod indicates a modulo operation, and when X=12, A=0, B= 8, and C=4, when X=8, A=0, B=0, and C=4, when X=4, A=0 and C=4, and/or when X=4, A=0, B=4, and C=2;~~

~~when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the N/2 resource blocks, $i=(12+T+A)\bmod W/2$, $j=(9-T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, T=1, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, T=0, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C, n indicates an identifier of a cell in which the first terminal device is located, mod indicates a modulo operation, and when X=8, A=0, B= 8, and C=2, when X=6, A=0, B= 4, and C=2, and/or when X=4, A=0, B=0, and C=2; and~~

~~when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the N/2 resource blocks, $i=(4+T+A)\bmod W/2$, $j=(5-T+B)\bmod W/2$, Y=C, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, T=1, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, T=0, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C, n indicates an identifier of a cell in which the first terminal device is located, mod indicates a modulo operation, and when X=2, A=0 and C=2.~~

33. The apparatus according to any one of claims 28 to 30, wherein

~~resource indexes of Y REG bundles in X REG bundles corresponding to the AL that is supported by the first terminal device and that is equal to X are $\{i, i+1, \dots, i+(Y-1)\}$, and indexes of~~

remaining $(X - Y)$ REG bundles in the X REG bundles are $\{j, j+1, \dots, j+(X - Y - 1)\}$; and

i and j meet at least one of the following cases:

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i = (n+A) \bmod W/2$, $j = (n+B) \bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=8$ and $C=16$, when $X=8$, $A=16$ and $C=8$, when $X=8$, $A=8$, $B=20$, and $C=4$, when $X=4$, $A=8$, $B=20$, and $C=2$, when $X=4$, $A=10$, $B=22$, and $C=2$, when $X=4$, $A=8$, $B=22$, and $C=2$, when $X=4$, $A=10$, $B=20$, and $C=2$, when $X=20$, $A=4$ and $C=20$, when $X=22$, $A=2$ and $C=22$, and/or when $X=24$, $A=2$, $B=26$, and $C=22$;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i = (n+A) \bmod W/2$, $j = (n+B) \bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=0$ and $C=16$, when $X=12$, $A=4$ and $C=12$, when $X=8$, $A=8$ and $C=8$, when $X=8$, $A=4$, $B=12$, and $C=4$, when $X=4$, $A=12$, 4 , or 8 , and $C=4$, when $X=4$, $A=10$, $B=14$, and $C=2$, and/or when $X=4$, $A=6$, $B=14$, and $C=2$;

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i = (n+A) \bmod W/2$, $j = (n+B) \bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , $n = n_{\text{CellID}}$, n_{CellID} indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=8$, $A=6$, $B=8$, and $C=2$, when $X=6$, $A=6$, $B=10$, and $C=2$, and/or when $X=4$, $A=6$, $B=12$, and $C=2$;

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i = (n+A) \bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates

a modulo operation, and when $X=12$, $A=0$ and $C=12$, when $X=8$, $A=4$ and $C=8$, when $X=4$, $A=8$ and $C=4$, and/or when $X=4$, $A=4$ and $C=4$;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 48, and the bandwidth supported by the first terminal device is less than the bandwidth corresponding to the N resource blocks and is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , $n=n_{\text{CellID}}$, n_{CellID} indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=8$, $A=0$ and $C=8$, when $X=6$, $A=2$ and $C=6$, and/or when $X=4$, $A=4$ and $C=4$; and

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 48, and the bandwidth supported by the first terminal device is less than the bandwidth corresponding to the N resource blocks and is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(n+A)\bmod W/2$, $j=(n+B)\bmod W/2$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , $n=n_{\text{CellID}}$, n_{CellID} indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=2$, $A=2$ and $C=2$.

34. The apparatus according to any one of claims 28 to 30, wherein

indexes of Y CCE resources in X CCE resources corresponding to the AL that is supported by the first terminal device and that is equal to X are $\{i, i+1, \dots, i+(Y-1)\}$, and indexes of $(X-Y)$ CCE resources in the X CCE resources are $\{j, j+1, \dots, j+(X-Y-1)\}$; and

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(16+T+A)\bmod W/2$, $j=(32+T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=0$ and $C=16$, when $X=8$, $A=0$, $B=0$, and $C=0$, when $X=8$, $A=0$, $B=8$, and $C=4$, when $X=4$, $A=0$, $B=8$, and $C=2$, when $X=4$, $A=4$, $B=10$, and $C=2$, when $X=4$, $A=0$, $B=10$, and $C=2$, when $X=4$, $A=4$, $B=8$, and

$C=2$, when $X=20$, $A=8$ and $C=8$, when $X=22$, $A=12$ and $C=10$, and/or when $X=24$, $A=12$, $B=5$, and $C=22$;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(8+T+A)\bmod W/2$, $j=(24+T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=16$, $A=8$ and $C=16$, when $X=12$, $A=0$ and $C=12$, when $X=8$, $A=8$ and $C=8$, when $X=8$, $A=0$, $B=0$, and $C=4$, when $X=4$, $A=0$, 8 , or 16 , and $C=4$, when $X=4$, $A=12$, $B=4$, and $C=2$, and/or when $X=4$, $A=4$, $B=4$, and $C=2$;

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 96, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(12+T+A)\bmod W/2$, $j=(9-T+B)\bmod W/2$, $Y=C$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=8$, $A=0$, $B=8$, and $C=2$, when $X=6$, $A=0$, $B=4$, and $C=2$, and/or when $X=4$, $A=0$, $B=0$, and $C=2$;

when the quantity l of symbols in the first control resource set is equal to 3, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(8+T+A)\bmod W/2$, $j=(16+T+B)\bmod W/2$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{l-u} and less than or equal to $2^{l-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{l-u} or greater than $2^{l-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=12$, $A=0$ and $C=12$, when $X=8$, $A=8$ and $C=8$, when $X=4$, $A=16$ and $C=4$, and/or when $X=4$, $A=8$ and $C=4$;

when the quantity l of symbols in the first control resource set is equal to 2, N is equal to 48,

and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(0+T+A)\bmod W/2$, $Y=C$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{1-u} and less than or equal to $2^{1-u}+W/2-1$, $T=1$, when a result obtained from $n \bmod W$ is less than 2^{1-u} or greater than $2^{1-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=8$, $A=0$ and $C=8$, when $X=6$, $A=4$ and $C=6$, and/or when $X=4$, $A=8$ and $C=4$; and

when the quantity l of symbols in the first control resource set is equal to 1, N is equal to 48, and the bandwidth supported by the first terminal device is greater than or equal to the bandwidth corresponding to the $N/2$ resource blocks, $i=(4+T+A)\bmod W/2$, $Y=C$, when a result obtained from $n \bmod W$ is greater than or equal to 2^{1-u} and less than or equal to $2^{1-u}+W/2-1$, $T=1$, or when a result obtained from $n \bmod W$ is less than 2^{1-u} or greater than $2^{1-u}+W/2-1$, $T=0$, a quantity of candidate control channels corresponding to the AL that is supported by the first terminal device and that is equal to X is C , n indicates an identifier of a cell in which the first terminal device is located, $\bmod$ indicates a modulo operation, and when $X=2$, $A=4$ and $C=2$.

35. The apparatus according to claim 31 or 33, wherein

the resource indexes $\{i, i+1, \dots, i+(Y-1)\}$ of the Y REG bundles in the X REG bundles corresponding to the AL that is supported by the first terminal device and that is equal to X are $d1i+e$ and $d1i+f+E$ after offset, the resource indexes $\{j, j+1, \dots, j+(X-Y-1)\}$ of the $(X-Y)$ REG bundles are $d2i+p$ and $d2i+q+P$ after offset, $e=0, 1, \dots$, or E , $f=0, 1, \dots$, or F , $E+F=Y$, $p=0, 1, \dots$, or P , $q=0, 1, \dots$, or Q , and $P+Q=X-Y$;

when $j+(X-Y-1) < W/2$, $d1i+e=i+e$, $d1i+f+E=i+f+E$, $d2i+p=j+p$, and $d2i+q+P=j+q+P$, or $d1i+e=i+e+W/2$, $d1i+f+E=i+f+E+W/2$, $d2i+p=j+p+W/2$, and $d2i+q+P=j+q+P+W/2$;

when $j < W/2 \leq j+(X-Y-1)$, $d1i+e=i+e$, $d1i+f+E=i+f+E$, $d2i+p=j+p$, $d2i+q+P=j+q+P-W/2$, $d1i+e=i+e+W/2$, $d1i+f+E=i+f+E+W/2$, $d2i+p=j+p+W/2$, $d2i+q+P=j+q+P$, and $P=W/2-1-j$;

when $i+(Y-1) < W/2 \leq j$, $d1i+e=i+e$, $d1i+f+E=i+f+E$, $d2i+p=j+p-W/2$, $d2i+q+P=j+q+P-W/2$, $d1i+e=i+e+W/2$, $d1i+f+E=i+f+E+W/2$, $d2i+p=j+p$, and $d2i+q+P=j+q+P$;

when $i < W/2 \leq i+(Y-1)$, $d1i+e=i+e$, $d1i+f+E=i+f+E-W/2$, $d2i+p=j+p-W/2$, $d2i+q+P=j+q+P-W/2$, $d1i+e=i+e+W/2$, $d1i+f+E=i+f+E$, $d2i+p=j+p$, $d2i+q+P=j+q+P$, and $E=W/2-1-j$; and

when $i \geq W/2$, $d1i+e=i+e-W/2$, $d1i+f+E=i+f+E-W/2$, $d2i+p=j+p-W/2$, $d2i+q+P=j+q+P-W/2$,

$d1i+e=i+e$, $d1i+f+E=i+f+E$, $d2i+p=j+p$, and $d2i+q+P=j+q+P$.

~~36. The apparatus according to any one of claims 28 to 35, wherein~~

~~the transceiver module is further configured to send control information to the first terminal device on R-REG bundles, and the control information to the second terminal device on S-REG bundles, wherein the R-REG bundles do not overlap with the S-REG bundles.~~

2137. A communication apparatus, comprising a transceiver module and a processing module, wherein the processing module is configured to implement the method according to any one of claims 1 to 9.

2238. A communication apparatus, comprising a transceiver module and a processing module, wherein the processing module is configured to implement the method according to any one of claims 10 to 18.

2339. A communication apparatus, comprising a processor and a communication interface, wherein the communication interface is coupled to the processor, and the processor is configured to perform the method according to any one of claims 1 to 9.

2440. A communication apparatus, comprising a processor and a communication interface, wherein the communication interface is coupled to the processor, and the processor is configured to perform the method according to any one of claims 10 to 18.

2541. A computer-readable storage medium, comprising instructions, wherein when the instructions are run on a computer, the computer is enabled to perform the method according to any one of claims 1 to 9.

2642. A computer-readable storage medium, comprising instructions, wherein when the instructions are run on a computer, the computer is enabled to perform the method according to any one of claims 10 to 18.