CLAIMS

~~What is claimed is:~~

1. A method for wireless communication at a user equipment (UE), comprising:

identifying, for a control region of a control channel, one or more sets of decoding candidates associated with one or more search space sets;

determining a total number of available control channel elements (CCEs) for the one or more search space sets based at least in part on a CCE channel estimation limitation;

determining respective numbers of available CCEs for the one or more search space sets based at least in part on the total number of available CCEs;

determining an applied one or more sets of decoding candidates by hashing a first subset of the one or more sets of decoding candidates to a first subset of CCEs of the control region based at least in part on the respective numbers of available CCEs, and admitting a second subset of the one or more sets of decoding candidates having hashed locations overlapping with the first subset of CCEs; and

monitoring the control region for the applied one or more sets of decoding candidates.

2. The method of claim 1, further comprising:

determining a total number of available blind decodes for the one or more search space sets based at least in part on a blind decoding limitation of the UE;

determining respective numbers of available blind decodes for the one or more search space sets based at least in part on the total number of available blind decodes; and

pruning the one or more sets of decoding candidates based at least in part on the respective numbers of available blind decodes for the one or more search space sets.

3. The method of claim 2, wherein the determining the respective numbers of available blind decodes comprises allocating the total number of available blind decodes for the one or more search space sets to the one or more search space sets in proportion to respective numbers of decoding candidates in the one or more search space sets.

4. The method of claim 2, wherein the determining the respective numbers of

available blind decodes comprises uniformly allocating the total number of available blind decodes to the one or more search space sets.

5. The method of claim 2, wherein the determining the respective numbers of available blind decodes comprises allocating a minimum number of blind decodes to each of the one or more search space sets.

6. The method of claim 2, wherein the one or more sets of decoding candidates comprise one or more sets of UE-specific decoding candidates of one or more UE-specific search space sets, the method further comprising:

identifying, for the control region, a set of common decoding candidates associated with a common search space set; and

hashing the set of common decoding candidates to a second subset of CCEs of the control region, wherein the total number of available blind decodes is determined based at least in part on a number of decoding candidates of the set of common decoding candidates and the blind decoding limitation of the UE.

7. The method of claim 1, wherein the determining the respective numbers of available CCEs for the one or more sets of decoding candidates comprises:

allocating the total number of available CCEs to the one or more search space sets in proportion to respective numbers of CCEs spanned by respective sets of decoding candidates in the one or more search space sets.

8. The method of claim 1, wherein the determining the respective numbers of available CCEs for the one or more sets of decoding candidates comprises:

uniformly allocating the total number of available CCEs to the one or more search space sets, allocating a minimum number of CCEs to each of the one or more search space sets, or a combination therefore.

9. The method of claim 1, wherein the determining the respective numbers of available CCEs for the one or more sets of decoding candidates comprises:

allocating the total number of available CCEs to the one or more search space sets based at least in part on an aggregation level size of decoding candidates in the one or more search space sets.

10. The method of claim 1, wherein, for each of the one or more search space sets, the determining the applied one or more sets of decoding candidates comprises performing, for each aggregation level from a highest aggregation level to a lowest aggregation level of the each of the one or more search space sets:

identifying decoding candidates of the each aggregation level spanning a number of CCEs less than or equal to a remaining number of the number of available CCEs;

hashing the identified decoding candidates to CCEs of the first subset of CCEs; and

including decoding candidates of a next aggregation level lower than the each aggregation level that hash to CCEs of the first subset of CCEs.

11. The method of claim 1, wherein, for each of the one or more search space sets, the determining the applied one or more sets of decoding candidates comprises:

identifying, for each aggregation level from a highest aggregation level to a lowest aggregation level of the each of the one or more search space sets, decoding candidates of the each aggregation level spanning a number of CCEs less than or equal to a remaining number of the number of available CCEs;

hashing the identified decoding candidates to CCEs of the first subset of CCEs; and

including decoding candidates of aggregation levels lower than a lowest aggregation level that hashed to CCEs of the first subset of CCEs.

12. The method of claim 1, wherein the one or more sets of decoding candidates comprise one or more sets of UE-specific decoding candidates of one or more UE-specific search space sets, the method further comprising:

identifying, for the control region, a set of common decoding candidates associated with a common search space set; and

hashing the set of common decoding candidates to a second subset of CCEs of the control region, wherein the total number of available CCEs is determined based at least

in part on the CCE channel estimation limitation and a number of CCEs of the second subset of CCEs.

13. ~~———~~ The method of claim 12, wherein the determining the applied one or more sets of decoding candidates comprises:

admitting, prior to the admitting the second subset of the one or more sets of decoding candidates, a third subset of the one or more sets of decoding candidates having hashed locations overlapping with the second subset of CCEs.

14. ~~———~~ ~~A method~~ An apparatus for wireless communication at a ~~base station,~~user equipment (UE), comprising:

~~identifying~~ a processor, memory in electronic communication with the processor; and instructions stored in the memory and executable by the processor to cause the apparatus to: identify, for a control region of a control channel, one or more sets of decoding candidates associated with one or more search space sets;

~~determining~~ determine a total number of available control channel elements (CCEs) for the one or more search space sets based at least in part on a CCE channel estimation limitation;

~~determining~~ determine respective numbers of available CCEs for the one or more search space sets based at least in part on the total number of available CCEs;

~~determining~~ determine an applied one or more sets of decoding candidates by hashing a first subset of the one or more sets of decoding candidates to a first subset of CCEs of the control region based at least in part on the ~~number~~respective numbers of available CCEs, and admitting a second subset of the one or more sets of decoding candidates having hashed locations overlapping with the first subset of CCEs; and

~~transmitting~~ monitor the control ~~information to the UE via~~region for the ~~control channel.~~

applied one or more sets of decoding candidates.

15. ~~———~~ The ~~method~~apparatus of claim 14, wherein the instructions are further ~~comprising:~~

~~determining~~executable by the processor to cause the apparatus to: determine a total number of available blind decodes for the one or more search space sets based at least in part on a blind decoding limitation of the UE;

~~determining~~ determine respective numbers of available blind decodes for the one or more search space sets based at least in part on the total number of available blind decodes; and

~~pruning the one or more sets of decoding candidates based at least in part on the respective numbers of available blind decodes for the one or more search space sets.~~

~~16. The method of claim 15, wherein the determining the respective numbers of available blind decodes comprises allocating the total number of available blind decodes for the one or more search space sets to the one or more search space sets in proportion to respective numbers of decoding candidates in the one or more search space sets.~~

~~17. The method of claim 15, wherein the determining the respective numbers of available blind decodes comprises uniformly allocating the total number of available blind decodes to the one or more search space sets.~~

~~18. The method of claim 15, wherein the determining the respective numbers of available blind decodes comprises allocating a minimum number of blind decodes to each of the one or more search space sets.~~

~~19. The method of claim 15, wherein the one or more sets of decoding candidates comprise one or more sets of UE-specific decoding candidates of one or more UE-specific search space sets, the method further comprising:~~

~~identifying, for the control region, a set of common decoding candidates associated with a common search space set; and~~

~~hashing the set of common decoding candidates to a second subset of CCEs of the control region, wherein the total number of available blind decodes is determined based at least in part on a number decoding candidates of the set of common decoding candidates and the blind decoding limitation of the UE.~~

~~20. The method of claim 14, wherein the determining the respective numbers of available CCEs for the one or more sets of decoding candidates comprises:~~

~~allocating the total number of available CCEs to the one or more search space sets in proportion to respective numbers of CCEs spanned by respective sets of decoding candidates in the one or more search space sets.~~

21. The method of claim 14, wherein the determining the respective numbers of available CCEs for the one or more sets of decoding candidates comprises:

uniformly allocating the total number of available CCEs to the one or more search space sets, allocating a minimum number of CCEs to each of the one or more search space sets, or a combination thereof.

22. The method of claim 14, wherein the determining the respective numbers of available CCEs for the one or more sets of decoding candidates comprises:

allocating the total number of available CCEs to the one or more search space sets based at least in part on an aggregation level size of decoding candidates in the one or more search space sets.

23. The method of claim 14, wherein, for each of the one or more search space sets, the determining the applied one or more sets of decoding candidates comprises performing, for each aggregation level from a highest aggregation level to a lowest aggregation level of the each of the one or more search space sets:

identifying decoding candidates of the each aggregation level spanning a number of CCEs less than or equal to a remaining number of the number of available CCEs;

hashing the identified decoding candidates to CCEs of the first subset of CCEs; and

including decoding candidates of a next aggregation level lower than the each aggregation level that hash to CCEs of the first subset of CCEs.

24. The method of claim 14, wherein, for each of the one or more search space sets, the determining the applied one or more sets of decoding candidates comprises:

identifying, for each aggregation level from a highest aggregation level to a lowest aggregation level of the each of the one or more search space sets, decoding candidates of the each aggregation level spanning a number of CCEs less than or equal to a remaining number of the number of available CCEs;

hashing the identified decoding candidates to CCEs of the first subset of CCEs; and

including decoding candidates of aggregation levels lower than a lowest aggregation level that hashed to CCEs of the first subset of CCEs.

25. The method of claim 14, wherein the one or more sets of decoding candidates comprise one or more sets of UE-specific decoding candidates of one or more UE-specific search space sets, the method further comprising:

identifying, for the control region, a set of common decoding candidates associated with a common search space set; and

hashing the set of common decoding candidates to a second subset of CCEs of the control region, wherein the total number of available CCEs is determined based at least in part on the CCE channel estimation limitation and a number of CCEs of the second subset of CCEs.

26. The method of claim 25, wherein the determining the applied one or more sets of decoding candidates comprises:

admitting, prior to the admitting the second subset of the one or more sets of decoding candidates, a third subset of the one or more sets of decoding candidates having hashed locations overlapping with the second subset of CCEs.

27. An apparatus for wireless communication at a user equipment (UE), comprising:

means for identifying, for a control region of a control channel, one or more sets of decoding candidates associated with one or more search space sets;

means for determining a total number of available control channel elements (CCEs) for the one or more search space sets based at least in part on a CCE channel estimation limitation;

means for determining respective numbers of available CCEs for the one or more search space sets based at least in part on the total number of available CCEs;

means for determining an applied one or more sets of decoding candidates by hashing a first subset of the one or more sets of decoding candidates to a first subset of CCEs of the control region based at least in part on the respective numbers of available CCEs, and admitting a second subset of the one or more sets of decoding candidates having hashed locations overlapping with the first subset of CCEs; and

means for monitoring the control region for the applied one or more sets of decoding candidates.

28. The apparatus of claim 27, further comprising:

means for determining a total number of available blind decodes for the one or more search space sets based at least in part on a blind decoding limitation of the UE;

~~means for determining respective numbers of available blind decodes for the one or more search space sets based at least in part on the total number of available blind decodes; and~~

~~means for pruning the one or more sets of decoding candidates based at least in part on the respective numbers of available blind decodes for the one or more search space sets.~~

~~29. An apparatus for wireless communication at a base station, comprising:~~

~~means for identifying, for a control region of a control channel, one or more sets of decoding candidates associated with one or more search space sets;~~

~~means for determining a total number of available control channel elements (CCEs) for the one or more search space sets based at least in part on a CCE channel estimation limitation;~~

~~means for determining respective numbers of available CCEs for the one or more search space sets based at least in part on the total number of available CCEs;~~

~~means for determining an applied one or more sets of decoding candidates by hashing a first subset of the one or more sets of decoding candidates to a first subset of CCEs of the control region based at least in part on the number of available CCEs, and admitting a second subset of the one or more sets of decoding candidates having hashed locations overlapping with the first subset of CCEs; and~~

~~means for transmitting control information to the UE via the control channel.~~

~~30. The apparatus of claim 29, further comprising:~~

~~means for determining a total number of available blind decodes for the one or more search space sets based at least in part on a blind decoding limitation of the UE;~~

~~means for determining respective numbers of available blind decodes for the one or more search space sets based at least in part on the total number of available blind decodes; and~~

~~means for pruning~~ prune the one or more sets of decoding candidates based at least in part on the respective numbers of available blind decodes for the one or more search space sets.