CLAIMS

~~**WHAT IS CLAIMED IS:**~~

1.~~——~~ A method for wireless communications, comprising:

~~———~~ obtaining a payload to be transmitted;

~~———~~ partitioning the payload into a plurality of blocks;

~~———~~ partitioning each block of the plurality of blocks into a plurality of sections;

deriving redundancy check information for each section of the plurality of sections; ~~and~~

~~———~~generating a plurality of codewords, each comprising a block of the plurality of blocks and the redundancy check information for each section of the block, wherein ~~a location of each of~~ the sections in a respective codeword of the plurality of codewords ~~is determined~~are arranged in the codeword based on an error rate corresponding to each of the sections; transmitting the plurality of codewords to a wireless node; and receiving feedback from the wireless node indicating whether the plurality of sections of each block were decoded by the wireless node, wherein the feedback comprises one or more bits.

2.~~——~~ The method of claim 1, wherein the plurality of sections of each block comprises a first section, a second section, and a third section, and wherein the first section of each block has a lower error rate than the second section of each block and the second section of each block has a lower error rate than the third section of each block.

3.~~——~~ The method of claim 2, ~~further comprising:~~

~~———~~wherein: receiving the feedback comprises receiving an indication that the first section of each block or the second section of each block was not ~~properly decoded;~~ decoded; the method further comprises: determining whether the third section of each block was decoded based on the indication; and retransmitting the third section of each block based on the determination.

~~——— determining whether the third section of each block was properly decoded based on the indication; and~~

~~retransmitting the third section of each block based on the determination.~~

4.~~——~~ The method of claim 1, ~~further comprising receiving an indication of whether the plurality of sections of each block were properly decoded,~~ wherein the plurality of sections of each block ~~comprise~~comprises at least three sections, and ~~where~~wherein the indication comprises a fewer number of bits than a number of sections of each block.

5.~~——~~ The method of claim 1, ~~further comprising:~~

wherein: receiving the feedback comprises receiving an indication that two sections of each block were not ~~properly~~ decoded, wherein the indication comprises a bit corresponding to each of the two sections; and

the method further comprises re-transmitting the two sections of each block based on the indication.

6. The method of claim 1, wherein the redundancy check information comprises a cyclic redundancy check (CRC).

7. The method of claim 1, wherein the codewords are encoded using polar coding.

8. A method for wireless communications, comprising:

receiving a plurality of codewords, each comprising a plurality of blocks, wherein each of the plurality of blocks ~~comprise~~comprises a plurality of sections and redundancy check information for each section of the plurality of sections, wherein ~~a location of each of~~ the plurality of sections ~~of each block is determined~~in a respective codeword of the plurality of codewords are arranged in the codeword based on an error rate corresponding to each of the plurality of sections of each block;

decoding the plurality of sections of each block;

verifying whether the plurality of sections of each block were ~~properly~~ decoded based on the redundancy check information for each of the decoded sections; and

transmitting feedback comprising an indication of whether the plurality of sections of each block was ~~properly~~ decoded based on the verification, wherein the feedback comprises one or more bits.

9. The method of claim 8, wherein the plurality of sections of each block comprises at least three sections, and ~~where~~wherein the indication comprises a fewer number of bits than a number of sections of the plurality of sections.

10. The method of claim 8, wherein the plurality of sections of each block comprises a first section, a second section, and a third section, and wherein the first section of each block has a lower error rate than the second section of each block and the second section of each block has a lower error rate than the third section of each block.

11. The method of claim 10, wherein the indication comprises a first bit used to indicate whether the second section of each block was ~~properly~~ decoded and a second bit used to indicate whether the third section of each block was ~~properly~~ decoded.

12. The method of claim 8, further comprising:

transmitting an indication of whether two sections of each block were ~~properly~~ decoded based on the verification, wherein the indication comprises a bit corresponding to each of the two sections.

13. The method of claim 8, wherein the redundancy check information comprises a cyclic redundancy check (CRC).

14. The method of claim 8, wherein the decoding comprises performing CRC-aided successive cancellation list (CA-SCL) decoding based on the redundancy check information.

15. The method of claim 8, wherein the codewords are encoded using polar coding.

16. An apparatus for wireless communications, comprising:

at least one processor configured to:

obtain a payload to be transmitted;

partition the payload into a plurality of blocks;

partition each block of the plurality of blocks into a plurality of sections;

derive redundancy check information for each section of the plurality of sections; and

generate a plurality of codewords, each comprising a block of the plurality of blocks and the redundancy check information for each section of the block, wherein a location of each of the sections in the codewords is determined based on an error rate corresponding to each of the sections; and

a memory coupled to the at least one processor.

17. An apparatus for wireless communications, comprising:

at least one antenna;

a processing system configured to:

receive, via the at least one antenna, a plurality of codewords, each comprising a plurality of blocks, wherein each of the plurality of blocks comprise a plurality of sections and redundancy check information for each section of the plurality of sections, wherein a location of each of the plurality of sections of each block is determined based on an error rate corresponding to each of the plurality of sections of each block;

decode the plurality of sections of each block;

verify whether the plurality of sections of each block were properly decoded based on the redundancy check information for each of the decoded sections; and

transmit, via the at least one antenna, an indication of whether the plurality of sections of each block was properly decoded based on the verification.

18. An apparatus for wireless communications, comprising:

means for obtaining a payload to be transmitted;

means for partitioning the payload into a plurality of blocks;

means for partitioning each block of the plurality of blocks into a plurality of sections;

means for deriving redundancy check information for each section of the plurality of sections; ~~and~~

means for generating a plurality of codewords, each comprising a block of the plurality of blocks and the redundancy check information for each section of the block, wherein ~~a location of each of~~ the sections in a respective codeword of the plurality of codewords ~~is determined~~are arranged in the codeword based on an error rate corresponding to each of the sections; means for transmitting the plurality of codewords to a wireless node; and means for receiving feedback from the wireless node indicating whether the plurality of sections of each block were decoded by the wireless node, wherein the feedback comprises one or more bits.

17. The apparatus of claim 16, wherein the plurality of sections of each block comprises a first section, a second section, and a third section, and wherein the first section of each block has a lower error rate than the second section of each block and the second section of each block has a lower error rate than the third section of each block.

18. The apparatus of claim 17, wherein: the means for receiving feedback comprises means for receiving an indication that the first section of each block or the second section of each block was not decoded; the apparatus further comprising: means for determining whether the third section of each block was decoded based on the indication; and means for retransmitting the third section of each block based on the determination.

19.—— The apparatus of claim 16, wherein the plurality of sections of each block comprise at least three sections, and where the indication comprises a fewer number of bits than a number of sections of each block.

20. The apparatus of claim 16, wherein: the means for receiving the feedback comprises means for receiving an indication that two sections of each block were not decoded, wherein the indication comprises a bit corresponding to each of the two sections; and the apparatus further comprises means for re-transmitting the two sections of each block based on the indication.

21. The apparatus of claim 16, wherein the redundancy check information comprises a cyclic redundancy check (CRC).

22. The apparatus of claim 16, wherein the codewords are encoded using polar coding.

23. An apparatus for wireless communications, comprising:

means for receiving~~, via the at least one antenna,~~ a plurality of codewords, each comprising a plurality of blocks, wherein each of the plurality of blocks ~~comprise a plurality of sections and redundancy check information for each section of the plurality of sections, wherein a location of each of the plurality of sections of each block is determined based on an error rate corresponding to each of the plurality of sections of each block;~~

~~means for decoding the plurality of sections of each block;~~

means for verifying whether the plurality of sections of each block were properly decoded based on the redundancy check information for each of the decoded sections; and

means for transmitting an indication of whether the plurality of sections of each block was properly decoded based on the verification.

20. A computer-readable medium having instructions stored thereon for:

obtaining a payload to be transmitted;

partitioning the payload into a plurality of blocks;

partitioning each block of the plurality of blocks into a plurality of sections;

derivingcomprises a plurality of sections and redundancy check information for each section of the plurality of sections; and

generating a plurality of codewords, each comprising a block of the plurality of blocks and the redundancy check information for each section of the block, wherein a location of each of the sections , wherein the plurality of sections in the a respective codeword of the plurality of codewords is determined based on an error rate corresponding to each of the sections.

21. A computer-readable medium having instructions stored thereon for:

receiving a plurality of codewords, each comprising a plurality of blocks, wherein each of the plurality of blocks comprise a plurality of sections and redundancy check information for each section of the plurality of sections, wherein a location of each of the plurality of sections of each block is determinedare arranged in the codeword based on an error rate corresponding to each of the plurality of sections of each block;

means for decoding the plurality of sections of each block;

means for verifying whether the plurality of sections of each block were properly decoded based on the redundancy check information for each of the decoded sections; and

means for transmitting feedback comprising an indication of whether the plurality of sections of each block was decoded based on the verification, wherein the feedback comprises one or more bits.

transmitting an indication of whether 24. The apparatus of claim 23, wherein the plurality of sections of each block comprises at least three sections, and wherein the indication comprises a fewer number of bits than a number of sections of the plurality of sections.

25. The apparatus of claim 23, wherein the plurality of sections of each block was properlycomprises a first section, a second section, and a third section, and wherein the first section of each block has a lower error rate than the second section of each block and the second section of each block has a lower error rate than the third section of each block.

26. The apparatus of claim 25, wherein the indication comprises a first bit used to indicate whether the second section of each block was decoded and a second bit used to indicate whether the third section of each block was decoded.

27. The apparatus of claim 23, further comprising: means for transmitting an indication of whether two sections of each block were decoded based on the verification~~.~~, wherein the indication comprises a bit corresponding to each of the two sections.

28. The apparatus of claim 23, wherein the redundancy check information comprises a cyclic redundancy check (CRC).

29. The apparatus of claim 23, wherein the means for decoding comprises means for performing CRC-aided successive cancellation list (CA-SCL) decoding based on the redundancy check information.

30. The apparatus of claim 23, wherein the codewords are encoded using polar coding.