CLAIMS

1. A method of coding video data, the method comprising:

determining that a current block of the video data is coded in transform-skip mode;

coding, in an interleaving manner, coefficient information on a coefficient-by-coefficient basis for coefficients in a residual block of the current block in a first pass based on the current block being coded in the transform-skip mode,

wherein the coefficient information for a coefficient includes one or more of:

a significance flag indicating whether a value of the coefficient is not zero;

a parity flag indicating whether the value of the coefficient is odd or even;

a sign flag indicating whether the value of the coefficient is positive or negative; and

one or more greater than flags indicating whether an absolute value of the coefficient is greater than respective threshold values; and

wherein coding, in the interleaving manner, the coefficient information comprises:

context-based coding, in the interleaving manner, coefficient information on the coefficient-by-coefficient basis as regular coded bins until a coded bin count limit is reached, wherein the coded bin count limit is an upper limit for the number of regular coded bins that is used in the current block being coded in transform-skip mode; and

bypass coding, in the interleaving manner, coefficient information on the coefficient-by-coefficient basis after the coded bin count limit is reached; and

after the first pass, coding remainder information for coefficients in the residual block of the current block in a second pass based on the current block being coded in the transform-skip mode, wherein coding the remainder information comprises:

coding information indicative of a remaining absolute value of a particular coefficient, wherein the coded bin count limit is reached during the coding of the particular coefficient; and

coding respective values of coefficients following the particular coefficient.

2. The method of claim 1, wherein, in the transform-skip mode, a transformation of the coefficients in the residual block from one domain to another domain is skipped.

3. The method of claim 1, wherein coding the remainder information comprises bypass coding the remainder information.

4. The method of claim 1,

wherein coding, in the interleaving manner, comprises parsing, in the interleaving manner, the coefficient information on the coefficient-by-coefficient basis for coefficients in the residual block of the current block in the first pass; and

wherein coding the remainder information comprises parsing the remainder information for coefficients in the residual block of the current block in the second pass.

5. The method of claim 1,

wherein coding, in the interleaving manner, comprises signaling, in the interleaving manner, the coefficient information on the coefficient-by-coefficient basis for coefficients in the residual block of the current block in the first pass; and

wherein coding the remainder information comprises signaling the remainder information for coefficients in the residual block of the current block in the second pass.

6. A non-transitory computer-readable storage medium having stored thereon instructions that, when executed, cause one or more processors to execute the method of any one of claims 1-5.

7. A device for coding video data, the device comprising:

a memory configured to store video data; and

processing circuitry configured to:

determine that a current block of the video data is coded in transform-skip mode; and

code, in an interleaving manner, coefficient information on a coefficient-by-coefficient basis for coefficients in a residual block of the current block in a first pass based on the current block being coded in the transform-skip mode,

wherein the coefficient information for a coefficient includes one or more of:

a significance flag indicating whether a value of the coefficient is not zero;

a parity flag indicating whether the value of the coefficient is odd or even;

a sign flag indicating whether the value of the coefficient is positive or negative; and

one or more greater than flags indicating whether an absolute value of the coefficient is greater than respective threshold values; and

wherein to code, in the interleaving manner, the coefficient information, the processing circuitry is configured to:

context-based code, in the interleaving manner, coefficient information on the coefficient-by-coefficient basis as regular coded bins until a coded bin count limit is reached, wherein the coded bin count limit is an upper limit for the number of regular coded bins that is used in the current block being coded in transform-skip mode;

bypass code, in the interleaving manner, coefficient information on the coefficient-by-coefficient basis after the coded bin count limit is reached; and

after the first pass, code remainder information for coefficients in the residual block of the current block in a second pass based on the current block being coded in the transform-skip mode,

wherein to code the remainder information, the processing circuitry is configured to:

code information indicative of a remaining absolute value of a particular coefficient, wherein the coded bin count limit is reached during the coding of the particular coefficient; and

code respective values of coefficients following the particular coefficient.

8. The device of claim 7, wherein the processing circuitry, in the transform-skip mode, is configured to skip a transformation of the coefficients in the residual block from one domain to another domain.

9. The device of claim 7, wherein to code the remainder information, the processing circuitry is configured to bypass code the remainder information.

10. The device of claim 7,

wherein the processing circuitry comprises a video decoder;

wherein to code, in the interleaving manner, the processing circuitry is configured to parse, in the interleaving manner, the coefficient information on the coefficient-by-coefficient basis for coefficients in the residual block of the current block in the first pass; and

wherein to code the remainder information, the processing circuitry is configured to parse the remainder information for coefficients in the residual block of the current block in the second pass.

11. The device of claim 7,

wherein the processing circuitry comprises a video encoder;

wherein to code, in the interleaving manner, the processing circuitry is configured to signal, in the interleaving manner, the coefficient information on the coefficient-by-coefficient basis for coefficients in the residual block of the current block in the first pass; and

wherein to code the remainder information, the processing circuitry is configured to signal the remainder information for coefficients in the residual block of the current block in the second pass.

12. The device of claim 7, wherein the device comprises one or more of a camera, a computer, a mobile device, a broadcast receiver device, or a set-top box.