

WHAT IS CLAIMED IS:

1. A method of video processing, comprising:
performing a conversion between a current block of a video and a bitstream representation of the video according to a rule,
wherein the rule specifies that a scaling operation of a transform coding mode applied to the current block is configured independently of a size of the current block.
2. The method of claim 1, wherein the transform coding mode comprises a transform skip mode, and wherein the scaling operation comprises a scaling process for the transform coefficients associated with the transform coding mode.
3. The method of claim 2, wherein the scaling process comprises a bit-shifting operation, and wherein the bit-shifting operation is independent of the size of the current block.
4. The method of claim 1, wherein the transform coding mode comprises a block-based differential pulse code modulation (BDPCM) mode, and wherein the scaling operation comprises a scale factor used for converting between residual coefficient values of the current block and coded coefficients of the current block.
5. The method of claim 4, wherein the scale factor is a pre-defined constant.
6. The method of claim 5, wherein the scale factor is one.
7. The method of claim 4, wherein the scale factor is based on an internal bit-depth (ibd).
8. The method of claim 7, wherein the scale factor is $(15 - ibd)$.
9. The method of claim 4, wherein a transformation process for scaled transform coefficients is disabled, and wherein an output of a scaling process for the transform coefficients is used as an input to generate intermediate residual samples.

10. The method of claim 1, wherein the transform coding mode comprises a block-based differential pulse code modulation (BDPCM) mode, and wherein the scaling operation comprises a scaling process for the transform coefficients associated with the BDPCM mode.
11. The method of claim 10, wherein the scaling process comprises a bit-shifting operation, and wherein the bit-shifting operation is independent of the size of the current block.
12. A method of video processing, comprising:
 - performing a conversion between a current block of a video and a bitstream representation of the video according to a rule,
 - wherein the rule specifies that a dequantization process or a scaling operation of a transform coding mode applied to the current block is configured independently of the transform coding mode.
13. The method of claim 12, wherein the transform coding mode comprises a transform skip mode, and wherein a dequantization factor of the dequantization process is independent of the transform coding mode.
14. The method of claim 12, wherein the transform coding mode comprises a block-based differential pulse code modulation (BDPCM) mode, and wherein a dequantization factor of the dequantization is independent of the transform coding mode.
15. The method of claim 13 or 14, wherein the dequantization factor is denoted levelScale.
16. The method of claim 12, wherein the transform coding mode comprises a transform skip mode, wherein a height of the current block is unequal to a width of the current block, wherein the scaling operation comprises a scaling operation for transform coefficients, and wherein a bit-shifting operation used the scaling process is independent of a transform coding mode.
17. The method of claim 12, wherein the transform coding mode comprises a block-based differential pulse code modulation (BDPCM) mode, wherein a height of the current block is unequal to a width of the current block, wherein the scaling operation comprises a scaling

operation for transform coefficients, and wherein a bit-shifting operation used the scaling process is independent of a transform coding mode.

18. A method of video processing, comprising:

determining, for a conversion between a video comprising a current block and a bitstream representation of the video, that the conversion comprises an application of a transform to the current block; and

performing, based on the determining, the conversion,

wherein a bit-shifting operation of a scaling process for transform coefficients associated with the transform is based on whether the current block is coded with a block-based differential pulse code modulation (BDPCM) mode.

19. The method of claim 18, wherein when the current block is coded with the BDPCM mode, the bit-shifting operation for the current block is identical to the bit-shifting operation for a video block coded with a transform skip mode.

20. A method of video processing, comprising:

performing a conversion between a video comprising a current block and a bitstream representation of the video,

wherein a transform shift used when converting between residual coefficient values of the current block and coded coefficients of the current block is based on whether the current block is coded with a block-based differential pulse code modulation (BDPCM) mode.

21. The method of claim 20, wherein when the current block is coded with the BDPCM mode, the transform shift for the current block is identical to the transform shift for a video block coded with a transform skip mode.

22. A method of video processing, comprising:

determining, for a conversion between a video comprising a current block and a bitstream representation of the video, that the current block is coded using a block-based differential pulse code modulation (BDPCM) mode; and

- performing, based on determining, the conversion,
wherein a scaling list associated with the BDPCM mode is disabled.
23. The method of claim 22, wherein each entry in the scaling list is a pre-defined constant.
24. The method of claim 23, wherein the pre-defined constant is 16.
25. A method of video processing, comprising:
determining, for a conversion between a video comprising a current block and a bitstream representation of the video, that the conversion is performed by disabling an application of a transform to the current block; and
performing, based on the determining, the conversion,
wherein the conversion comprises a dequantization process, and wherein decoded coefficients after the dequantization process are constrained to a range with a minimum value (TsMin) and a maximum value (TsMax).
26. A method of video processing, comprising:
determining, for a conversion between a video comprising a current block and a bitstream representation of the video, that the current block is coded using a block-based differential pulse code modulation (BDPCM) mode; and
performing, based on the determining, the conversion,
wherein the conversion comprises a dequantization process, and wherein decoded coefficients after the dequantization process are constrained to a first range with a minimum value (BdpcmMin) and a maximum value (BdpcmMax).
27. The method of claim 25 or 26, wherein transformed coefficient are constrained to a second range with a minimum value (CoeffMin) and a maximum value (CoeffMax).
28. The method of claim 25 or 26, wherein the minimum value is $-(1 \ll \text{bitDepth})$, and wherein bitDepth is a bit depth for a color component of the video to which a transform skip mode has been applied.

29. The method of claim 25 or 26, wherein the maximum value is $[(1 \ll \text{bitDepth}) - 1]$, and wherein bitDepth is a bit depth for a color component of the video to which a transform skip mode has been applied.
30. The method of claim 25 or 26, wherein the minimum value is $-(1 \ll \min(\text{bitDepth}, 15))$, and wherein bitDepth is a bit depth for a color component of the video to which a transform skip mode has been applied.
31. The method of claim 25 or 26, wherein the maximum value is $[(1 \ll \min(\text{bitDepth}, 15)) - 1]$, and wherein bitDepth is a bit depth for a color component of the video to which a transform skip mode has been applied.
32. The method of any of claims 1 to 31, wherein performing the conversion comprises generating the bitstream representation from the current block.
33. The method of any of claims 1 to 31, wherein performing the conversion comprises generating the current block from the bitstream representation.
34. An apparatus in a video system comprising a processor and a non-transitory memory with instructions thereon, wherein the instructions upon execution by the processor, cause the processor to implement the method in any one of claims 1 to 33.
35. A computer program product stored on a non-transitory computer readable media, the computer program product including program code for carrying out the method in any one of claims 1 to 33.
36. A computer readable medium that stores the bitstream representation generated according to the method in any one of claims 1 to 33.