

CLAIMS

What is Claimed:

1. An apparatus for video decoding, comprising:
a processor configured to:
 - determine that intra sub-partitions (ISP) is enabled for a current block;
 - determine a sub-partition width for a sub-partition obtained via ISP;
 - determine a prediction block width based on the sub-partition width and a minimum prediction block width, wherein, on a condition that the sub-partition width is less than the minimum prediction block width, the prediction block width is equal to the minimum prediction block width, and on a condition that the sub-partition width is greater than or equal to the minimum prediction block width, the prediction block width is equal to the sub-partition width;
 - and
 - predict the current block based on a prediction block having the prediction block width.
2. A method for video decoding, comprising:
 - determining that intra sub-partitions (ISP) is enabled for a current block;
 - determining a sub-partition width for a sub-partition obtained via ISP;
 - determining a prediction block width based on the sub-partition width and a minimum prediction block width, wherein, on a condition that the sub-partition width is less than the minimum prediction block width, the prediction block width is equal to the minimum prediction block width, and on a condition that the sub-partition width is greater than or equal to the minimum prediction block width, the prediction block width is equal to the sub-partition width;
 - and
 - predicting the current block based on a prediction block having the prediction block width.
3. The apparatus of claim 1 or the method of claim 2, wherein the minimum prediction block width is 4 samples.

4. The apparatus of claim 1 or the method of claim 2, wherein the prediction block comprises a plurality of transform block sub-partitions when a current block width is 4 samples and a current block height is 8 samples or greater, or when the current block width is 8 samples and the current block height is 8 samples or greater.
5. The apparatus of claim 1 or the method of claim 2, wherein the sub-partition is predicted using neighboring samples of the current block and samples from a reconstructed sub-partition in the current block.
6. The apparatus of claim 1 or the method of claim 2, wherein the sub-partition is predicted using neighboring samples of the current block and samples from a reconstructed sub-partition in the current block when a current block width is 8 samples and a current block height is 8 samples or greater.
7. The apparatus of claim 1 or the method of claim 2, wherein the sub-partition width for the current block is determined based at least in part on whether a type of the ISP for the current block is a vertical split type or horizontal split type.
8. An apparatus for video encoding, comprising:
 - a processor configured to:
 - determine that intra sub-partitions (ISP) is enabled for a current block;
 - determine a sub-partition width for a sub-partition obtained via ISP;
 - determine a prediction block width based on the sub-partition width and a minimum prediction block width, wherein, on a condition that the sub-partition width is less than the minimum prediction block width, the prediction block width is equal to the minimum prediction block width, and on a condition that the sub-partition width is greater than or equal to the minimum prediction block width, the prediction block width is equal to the sub-partition width;
 - predict the current block based on a prediction block having the prediction block width; and
 - include a residual associated with the predicted current block in video data.
9. A method for video encoding, comprising:

determining that intra sub-partitions (ISP) is enabled for a current block;
determining a sub-partition width for a sub-partition obtained via ISP;
determining a prediction block width based on the sub-partition width and a minimum prediction block width, wherein, on a condition that the sub-partition width is less than the minimum prediction block width, the prediction block width is equal to the minimum prediction block width, and on a condition that the sub-partition width is greater than or equal to the minimum prediction block width, the prediction block width is equal to the sub-partition width;
predicting the current block based on a prediction block having the prediction block width; and
including a residual associated with the predicted current block in video data.

10. The apparatus of claim 1 or claim 8 or the method of claim 2 or claim 9, wherein the prediction block comprises two or more sub-partitions of the current block, and the two or more sub-partitions are predicted in parallel.

11. The apparatus of claim 8 or the method of claim 9, wherein the sub-partition is predicted using neighboring samples of the current block and samples from a reconstructed sub-partition in the current block.

12. The apparatus of claim 8 or the method of claim 9, wherein the sub-partition is predicted using neighboring samples of the current block and samples from a reconstructed sub-partition in the current block when a current block width is 8 samples and a current block height is 8 samples or greater.

13. The apparatus of claim 8 or the method of claim 9, wherein the sub-partition width for the current block is determined based at least in part on whether a type of the ISP for the current block is a vertical split type or horizontal split type.