CLAIMS

1. A method for video decoding, comprising:

decoding prediction information of a current block from a coded video bitstream, the prediction information being indicative of an intra block copy mode, the current block being one of a plurality of coding blocks in a current region of a current coding tree block (CTB) in a current picture;

determining whether the current block is to be reconstructed first in the current region;

when the current block is to be reconstructed first in the current region, determining a block vector for the current block, a reference block indicated by the block vector being in a search range that excludes a collocated region in a previously reconstructed CTB, a position of the collocated region in the previously reconstructed CTB having a same relative position as the current region in the current CTB, the search range being in the current picture; and

reconstructing at least one sample of the current block according the block vector,

wherein the search range includes coding blocks that are reconstructed after the collocated region and before the current block,

a size of the current CTB is less than a reference memory size, the position of the collocated region is offset by multiple widths of the current CTB from a position of the current region, and the coding blocks in the search range are in at least one of: the current CTB, the previously reconstructed CTB, and one or more reconstructed CTBs between the current CTB and the previously reconstructed CTB, and

the size of the current CTB is 64×64 samples, the reference memory size is 128×128 samples, the current CTB includes 4 regions of 32×32 samples, the previously reconstructed CTB includes 4 regions of 32×32 samples, the position of the collocated region is offset by 256 samples from the position of the current region.

2. The method of claim 1, wherein the coding blocks in the search range are in at least one of: the current CTB and the one or more reconstructed CTBs between the current CTB and the previously reconstructed CTB.

3. The method of claim 1 or 2, wherein the search range excludes the previously reconstructed CTB that is offset by N widths of the current CTB from the current CTB and N is a ratio of the reference memory size over the size of the current CTB.

4. The method of claim 1, wherein the current region is a region out of all regions of the current CTB, and wherein the method further comprises sequentially reconstructing each of the regions of the current CTB by updating the search range to newly exclude a collocated region in the previously reconstructed CTB when the current region changes.

5. An apparatus for video decoding, comprising processing circuitry configured to execute the method of any one of claims 1 to 4.

6. A computer-readable medium storing instructions which when executed by a computer for video decoding cause the computer to perform the method of any one of claims 1 to 4.