CLAIMS:

1. A method for video decoding in a decoder, comprising:

decoding, by a processor, prediction information of a current block in a current picture from a coded video bitstream, the prediction information being indicative of an inter prediction mode with a potential usage of a refinement technique which is based on a first reference picture and a second reference picture, and wherein the refinement technique includes at least one of bi-directional optical flow, BDOF, and decoder-side-motion vector refinement, DMVR;

determining, by the processor, whether a first equal weighting condition of chroma components from the first reference picture and the second reference picture is satisfied, and wherein the first equal weighting condition is determined to be satisfied when at least one of a first flag for chroma weight of the first reference picture and a second flag for chroma weight of the second reference picture usage are zero; and

disabling, by the processor, the refinement technique in a reconstruction of luma samples in the current block in response to a failure to satisfy the first equal weighting condition of the chroma components from the first reference picture and the second reference picture.

2. The method of claim 1, further comprising:

determining, by the processor, whether a second equal weighting condition of luma components from the first reference picture and the second reference picture is satisfied; and

disabling, by the processor, the refinement technique in the reconstruction of the luma sample in the current block in response to a failure to satisfy at least one of the first equal weighting condition of the chroma components and the second equal weighting condition of the luma components.

3. The method of claim 1, further comprising:

disabling, by the processor, the refinement technique in a reconstruction of a chroma sample in the current block in response to the failure to satisfy the first equal weighting condition of the chroma components from the first reference picture and the second reference picture.

4. The method of claim 1, wherein one of the first reference picture and the second reference picture has a larger picture order count than the current picture and the other of the first reference picture and the second reference picture has a smaller picture order count than the current picture.

5. An apparatus for video decoding, comprising:

processing circuitry configured to:

decode prediction information of a current block in a current picture from a coded video bitstream, the prediction information being indicative of an inter prediction mode with a potential usage of a refinement technique which is based on a first reference picture and a second reference picture;

determine whether a first equal weighting condition of chroma components from the first reference picture and the second reference picture is satisfied, and wherein the first equal weighting condition is determined to be satisfied when at least one of a first flag for chroma weight of the first reference picture and a second flag for chroma weight of the second reference picture usage are zero; and

disable the refinement technique in a reconstruction of luma samples in the current block in response to a failure to satisfy the first equal weighting condition of the chroma components from the first reference picture and the second reference picture.

6. The apparatus of claim 5, wherein the processing circuitry is configured to:

determine whether a second equal weighting condition of luma components from the first reference picture and the second reference picture is satisfied; and

disable the refinement technique in the reconstruction of the luma sample in the current block in response to a failure to satisfy at least one of the first equal weighting condition of the chroma components and the second equal weighting condition of the luma components.

7. The apparatus of claim 5, wherein the processing circuitry is configured to:

disable the refinement technique in a reconstruction of a chroma sample in the current block in response to the failure to satisfy the first equal weighting condition of the chroma components from the first reference picture and the second reference picture.

8. The apparatus of claim 5, wherein one of the first reference picture and the second reference picture has a larger picture order count than the current picture and the other of the first reference picture and the second reference picture has a smaller picture order count than the current picture.

9. A non-transitory computer-readable medium storing instructions which when executed by a computer for video decoding cause the computer to perform:

decoding prediction information of a current block in a current picture from a coded video bitstream, the prediction information being indicative of an inter prediction

mode with a potential usage of a refinement technique which is based on a first reference picture and a second reference picture;

determining whether a first equal weighting condition of chroma components from the first reference picture and the second reference picture is satisfied, and wherein the first equal weighting condition is determined to be satisfied when at least one of a first flag for chroma weight of the first reference picture and a second flag for chroma weight of the second reference picture usage are zero; and

disabling the refinement technique in a reconstruction of luma samples in the current block in response to a failure to satisfy the first equal weighting condition of the chroma components from the first reference picture and the second reference picture.

10. The non-transitory computer-readable medium of claim 9, further comprising:

determining whether a second equal weighting condition of luma components from the first reference picture and the second reference picture is satisfied; and

disabling the refinement technique in the reconstruction of the luma sample in the current block in response to a failure to satisfy at least one of the first equal weighting condition of the chroma components and the second equal weighting condition of the luma components.

11. The non-transitory computer-readable medium of claim 9, wherein the instructions cause the computer to further perform:

disabling the refinement technique in a reconstruction of a chroma sample in the current block in response to the failure to satisfy the first equal weighting condition of the chroma components from the first reference picture and the second reference picture.