METHOD, APPARATUS AND STORAGE MEDIUM FOR VIDEO CODING

INCORPORATION BY REFERENCE

[0001] This present application claims the benefit of priority to U.S. Patenet Application No. 17/063,149, "METHOD AND APPARATUS FOR VIDEO CODING" filed on October 5, 2020, which claims the benefit of priority to U.S. Provisional Application No. 62/953,457, "SIMPLIFICATION FOR GEO INTER BLOCK" filed on December 24, 2019, and U.S. Provisional Application No. 62/955,825, "LOOK-UP TABLE FREE METHOD IN WEIGHTING INDEX TO WEIGHT CONVERSION FOR GEO INTER BLOCK" filed on December 31, 2019. The entire disclosures of the prior applications are hereby incorporated by reference in their entirety.

TECHNICAL FIELD

[0002] The present disclosure describes embodiments generally related to video coding.

BACKGROUND

[0003] The background description provided herein is for the purpose of generally presenting the context of the disclosure. Work of the presently named inventors, to the extent the work is described in this background section, as well as aspects of the description that may not otherwise qualify as prior art at the time of filing, are neither expressly nor impliedly admitted as prior art against the present disclosure.

[0004] Video coding and decoding can be performed using inter-picture prediction with motion compensation. Uncompressed digital video can include a series of pictures, each picture having a spatial dimension of, for example, 1920 x 1080 luminance samples and associated chrominance samples. The series of pictures can have a fixed or variable picture rate (informally also known as frame rate) of, for example, 60 pictures per second or 60 Hz. Uncompressed video has significant bitrate requirements. For example, 1080p60 4:2:0 video at 8 bit per sample (1920x1080 luminance sample resolution at 60 Hz frame rate) requires close to 1.5 Gbit/s bandwidth. An hour of such video requires more than 600 GBytes of storage space.

[0005] One purpose of video coding and decoding can be the reduction of redundancy in the input video signal, through compression. Compression can help reduce the aforementioned bandwidth or storage space requirements, in some cases by two orders of magnitude or more. Both lossless and lossy compression, as well as a combination thereof can be employed.