

HANDLING VIDEO UNIT BOUNDARIES AND VIRTUAL BOUNDARIES

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application is based on International Patent Application No. PCT/CN2020/096044, filed on June 15, 2020, which claims the priority to and benefits of International Patent Application No. PCT/CN2019/091324, filed on June 14, 2019, International Patent Application No. PCT/CN2019/092861, filed on June 25, 2019, International Patent Application No. PCT/CN2019/095157, filed on July 8, 2019. All the aforementioned patent applications are hereby incorporated by reference in their entireties.

TECHNICAL FIELD

[0002] This patent document is directed generally to video coding and decoding technologies.

BACKGROUND

[0003] Video coding standards have evolved primarily through the development of the well-known ITU-T and ISO/IEC standards. The ITU-T produced H.261 and H.263, ISO/IEC produced MPEG-1 and MPEG-4 Visual, and the two organizations jointly produced the H.262/MPEG-2 Video and H.264/MPEG-4 Advanced Video Coding (AVC) and H.265/ High Efficiency Video Coding (HEVC) standards. Since H.262, the video coding standards are based on the hybrid video coding structure wherein temporal prediction plus transform coding are utilized. To explore the future video coding technologies beyond HEVC, Joint Video Exploration Team (JVET) was founded by VCEG and MPEG jointly in 2015. Since then, many new methods have been adopted by JVET and put into the reference software named Joint Exploration Model (JEM). In April 2018, the JVET between VCEG (Q6/16) and ISO/IEC JTC1 SC29/WG11 (MPEG) was created to work on the next generation Versatile Video Coding (VVC) standard targeting at 50% bitrate reduction compared to HEVC.

SUMMARY

[0004] Using the disclosed video coding, transcoding or decoding techniques, embodiments of video encoders or decoders can handle virtual boundaries of coding tree blocks to provide