CHROMA CODING MODE DETERMINATION BASED ON MATRIX-BASED INTRA PREDICTION

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application is a national phase of International Application No. PCT/CN2020/084488, filed on April 13, 2020, which claims the priority to and benefits of International Patent Application No. PCT/CN2019/082424, filed on April 12, 2019. For all purposes under the law, the entire disclosure of the aforementioned application is incorporated by reference as part of the disclosure of this application.

TECHNICAL FIELD

[0002] This patent document relates to video coding techniques, devices and systems.

BACKGROUND

[0003] In spite of the advances in video compression, digital video still accounts for the largest bandwidth use on the internet and other digital communication networks. As the number of connected user devices capable of receiving and displaying video increases, it is expected that the bandwidth demand for digital video usage will continue to grow.

SUMMARY

[0004] Devices, systems and methods related to digital video coding, and specifically, matrix-based intra prediction methods for video coding are described. The described methods may be applied to both the existing video coding standards (e.g., High Efficiency Video Coding (HEVC)) and future video coding standards (e.g., Versatile Video Coding (VVC)) or codecs.

[0005] A first example video processing method includes generating, for a conversion between a current video block of a video and a coded representation of the current video block, a first most probable mode (MPM) list using a first procedure based on a rule; and performing the conversion between the current video block and the coded representation of the current video block using the first MPM list, where the conversion of the current video block uses a matrix based intra prediction (MIP) mode in which a prediction block of the current video block is determined by performing, on previously coded samples of the video, a boundary downsampling operation, followed by a matrix vector multiplication operation, and selectively followed by an