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(54) Title: HISTORY-BASED RICE PARAMETER DERIVATIONS FOR WAVEFRONT PARALLEL PROCESSING IN VIDEO CODING

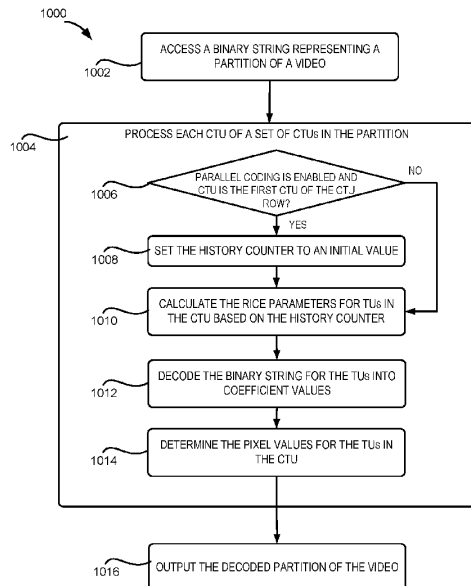


FIG. 10

(57) Abstract: In some embodiments, a video decoder decodes a video from a bitstream of the video using a history-based Rice parameter derivation along with the wavefront parallel processing (WPP). The video decoder accesses a binary string representing a partition of the video and processes each coding tree unit (CTU) in the partition to generate decoded coefficient values in the CTU. The process includes prior to decoding the CTU, determining whether WPP is enabled and the CTU is the first CTU of a current CTU row in the partition, and if so, setting a history counter to an initial value. The process further includes decoding the CTU by calculating the Rice parameters for transform units (TUs) in the CTU based on the value of the history counter and decoding the binary string corresponding to the TUs in the CTU into coefficient values of the TUs based on the calculated Rice parameters.

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