

ABSTRACT OF THE DISCLOSURE

Processing circuitry decodes information of a coding block from a bitstream. The information indicates an intra prediction mode for the coding block, a selection of a separable primary transform from a plurality of separable primary transform candidates, and a selection of a scan pattern from a plurality of scan pattern candidates. The processing circuitry determines whether selectable secondary non-separable transform is not applied to the bitstream and selectable separable primary transform is applied to the bitstream. Accordingly, processing circuitry determines residuals of the coding block from the bitstream based on the selection of the scan pattern and the selection of the separable primary transform. The processing circuitry reconstructs the coding block based on a combination of the residuals with an intra prediction of the coding block. The intra prediction of the coding block is based on the intra prediction mode.