

ABSTRACT OF THE DISCLOSURE

In a method of decoding, coded information of a coding unit (CU), a template region, and a plurality of reference regions is received. The coded information includes a first syntax element indicating whether the CU is predicted based on a template matching based multiple reference line (MRL) intra prediction mode. In response to the first syntax element indicating that the CU is predicted based on the template matching based multiple reference line (MRL) intra prediction mode, a plurality of cost values is determined between (i) respective prediction samples of the template region based on samples in each of the plurality of reference regions, and (ii) reconstructed samples of the template region corresponding to the respective prediction samples. A reference region from the plurality of reference regions is determined based on the plurality of cost values. Samples of the CU are reconstructed based on the samples in the determined reference region.

FIG. 1