

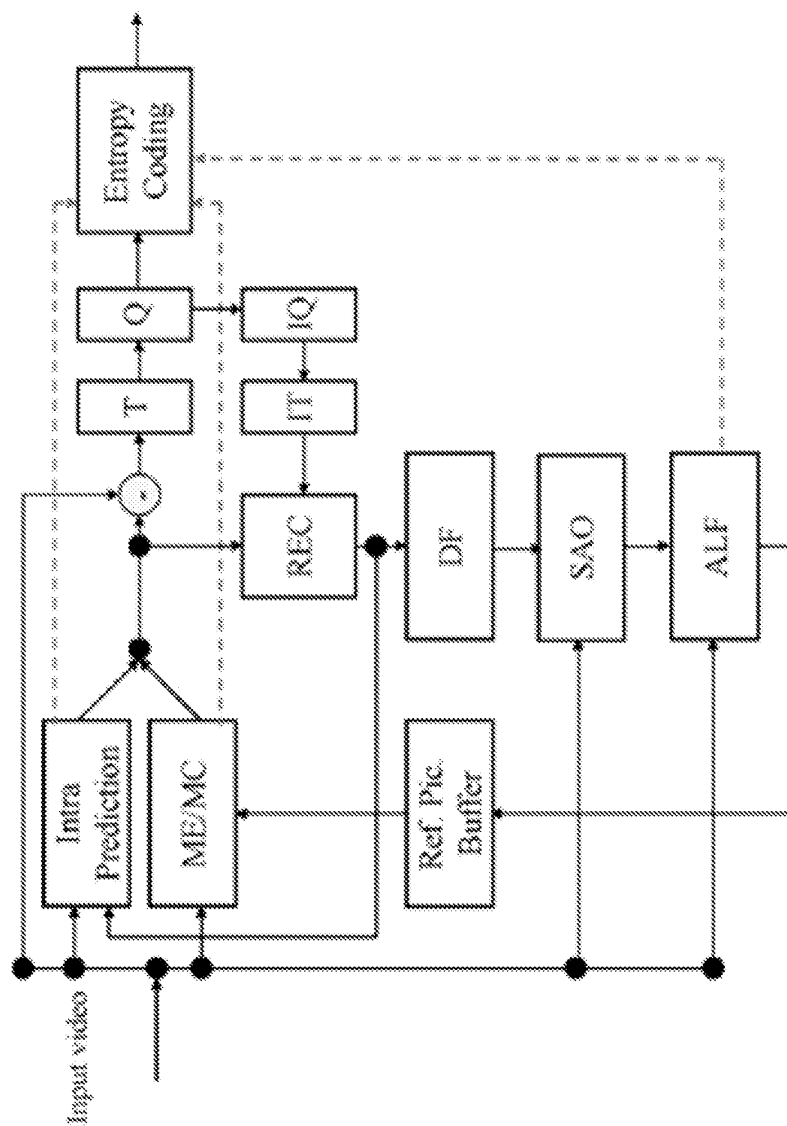


FIG. 1

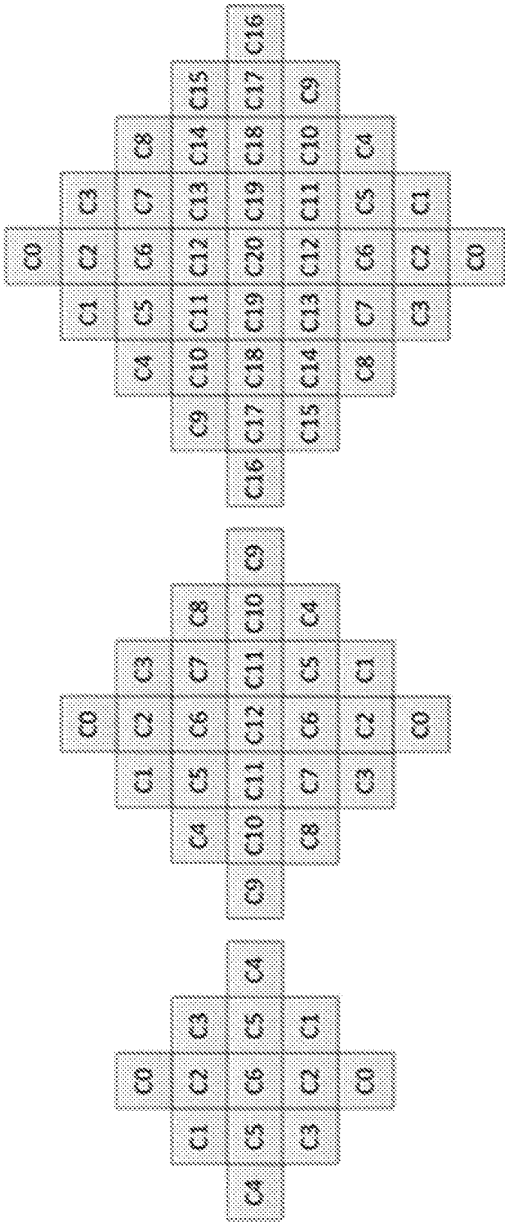
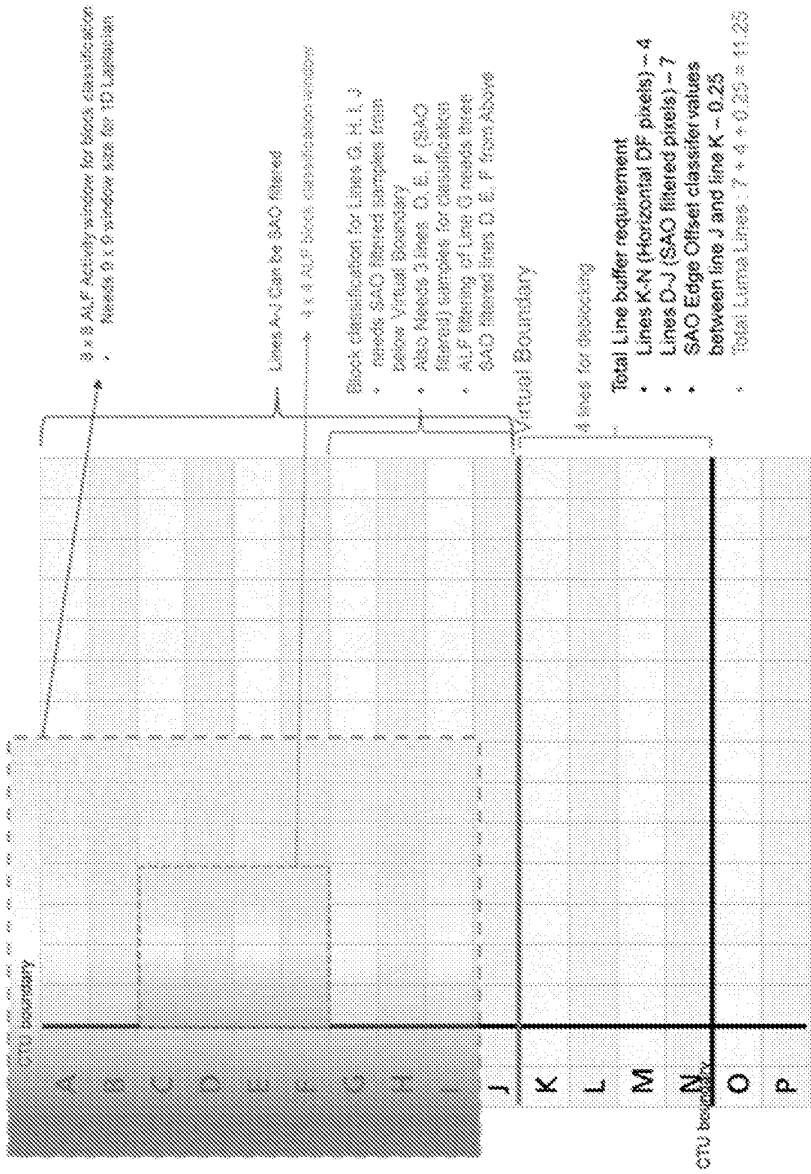
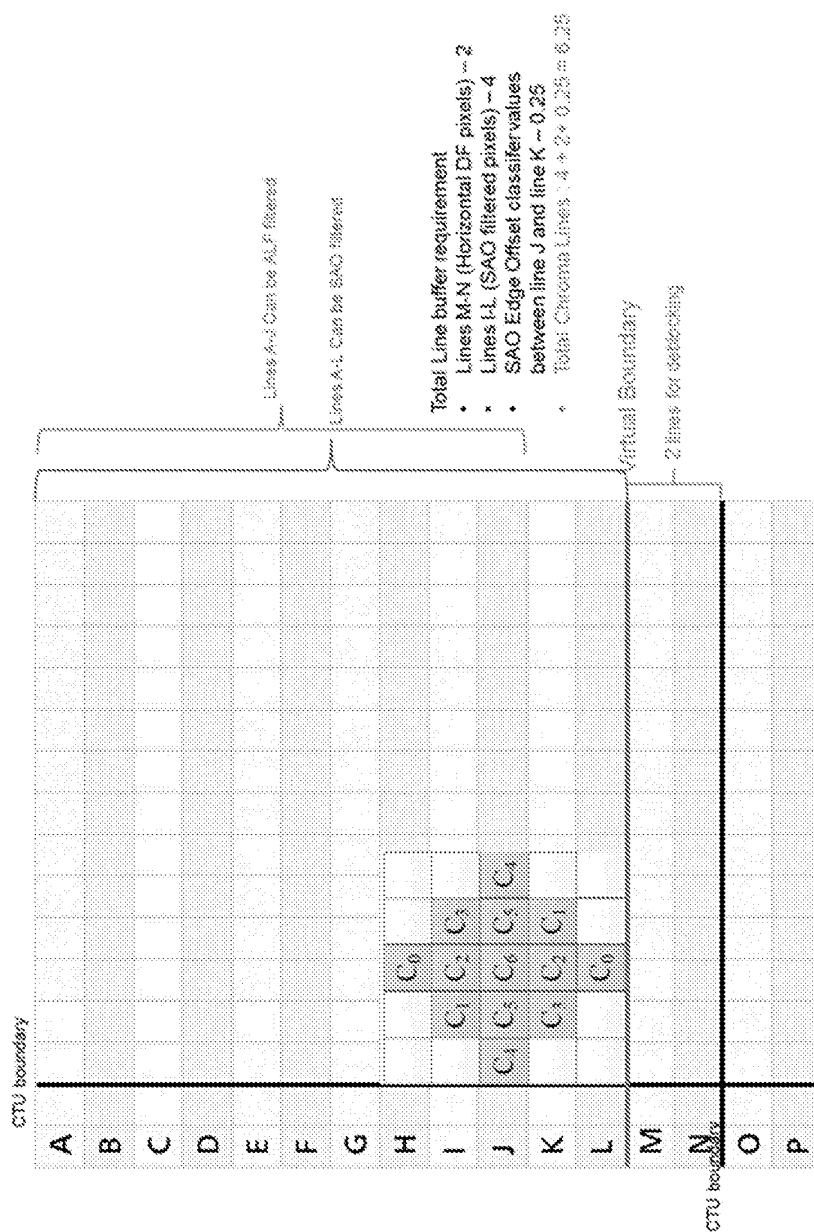


FIG. 2



Loop filter line buffer requirement in VTM-4.0 for Luma component

FIG. 3



Loop filter line buffer requirement in VTM-4.0 for Chroma component

FIG. 4

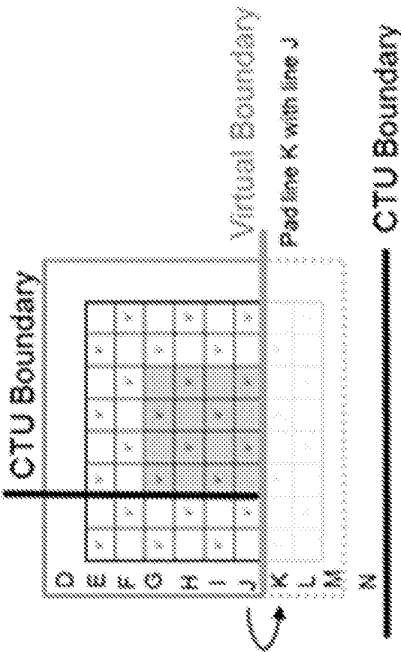


FIG. 5A

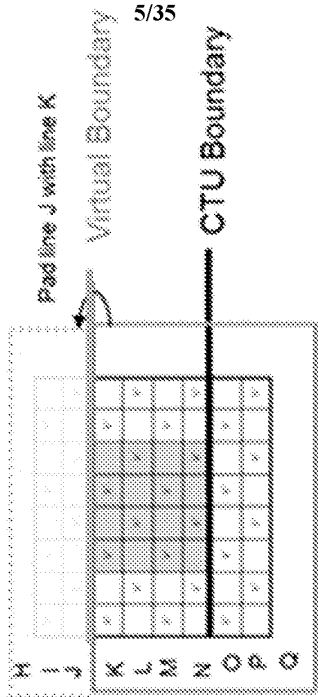
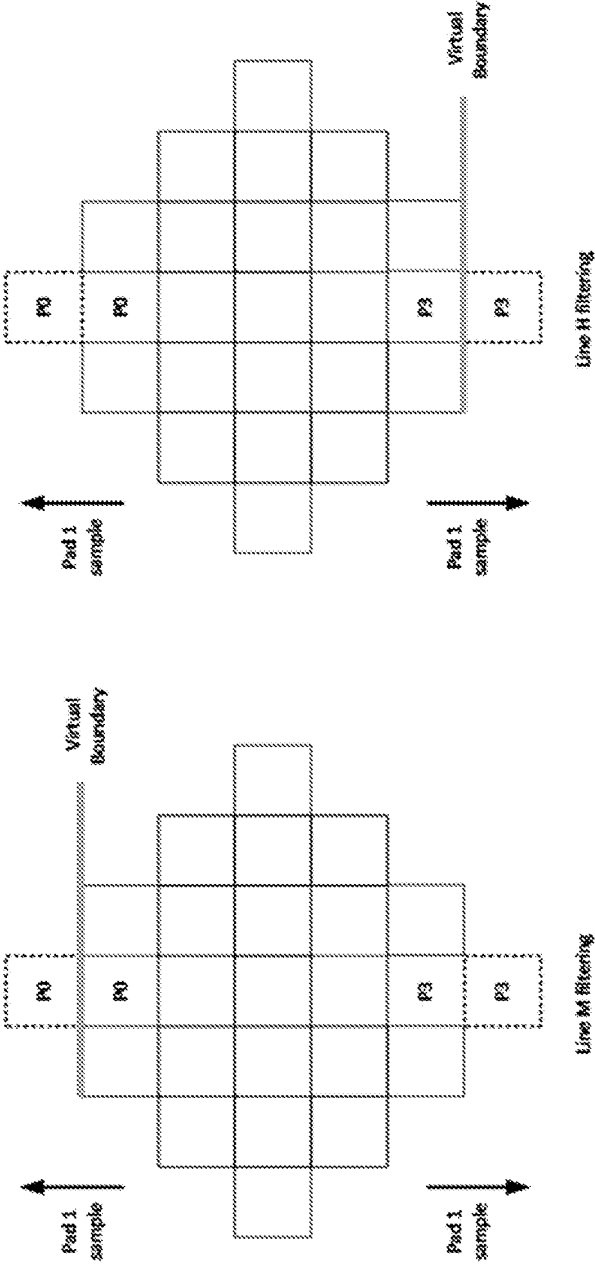
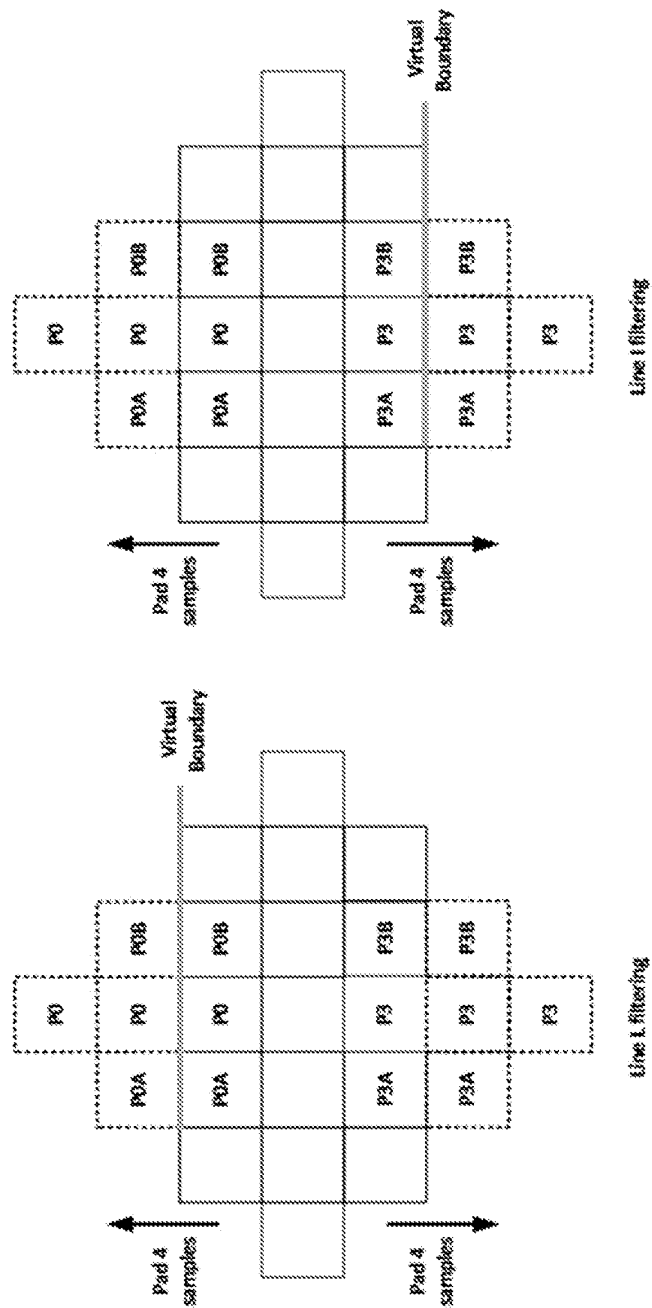


FIG. 5B



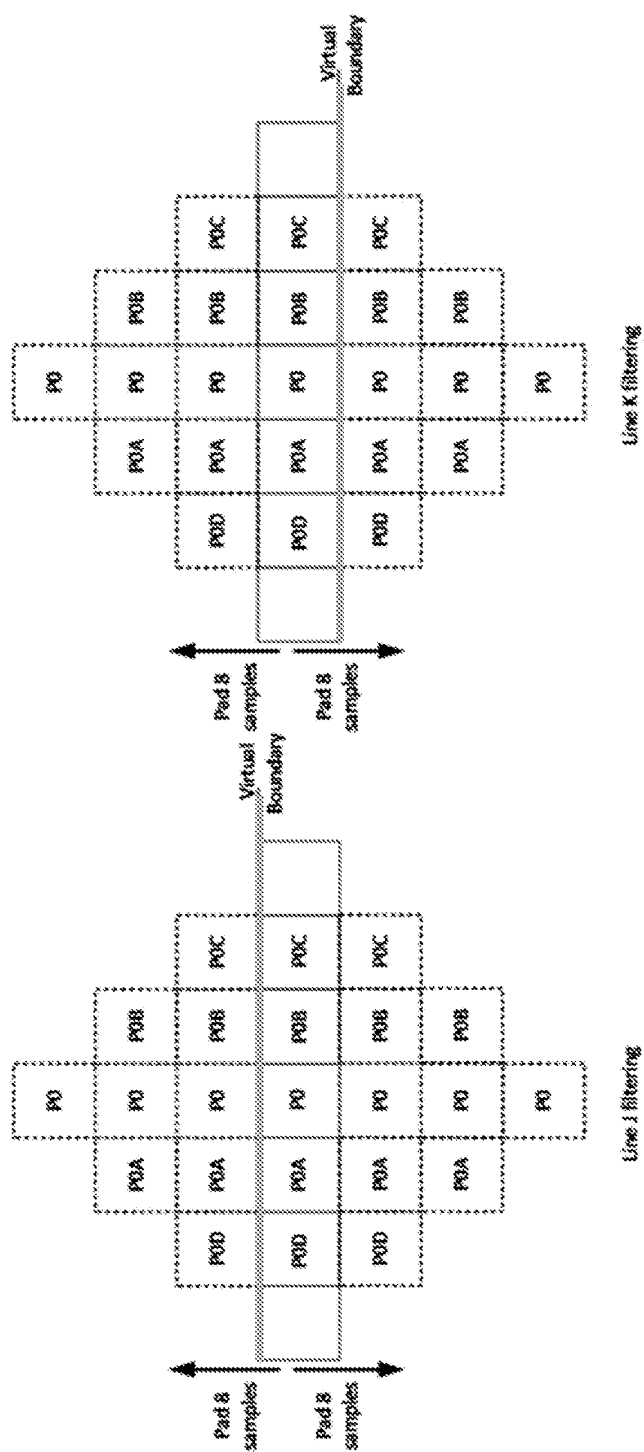
Modified luma ALF at virtual boundary (7x7 diamond filter support, center is the current sample to be filtered)

FIG. 6A



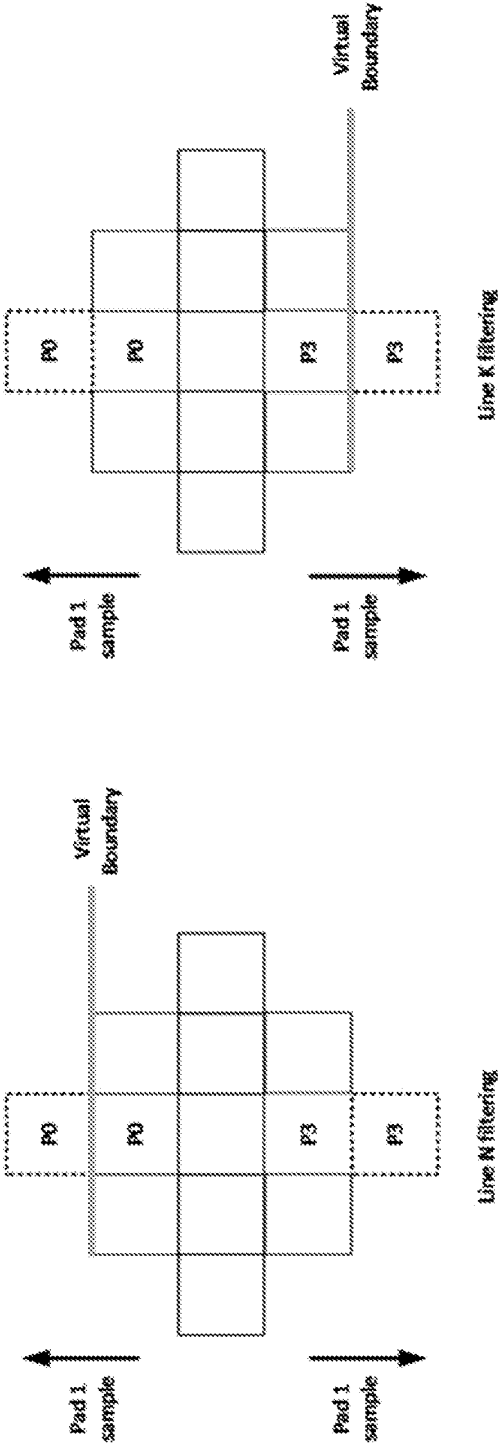
Modified luma ALF at virtual boundary (7x7 diamond filter support, center is the current sample to be filtered)

FIG. 6B



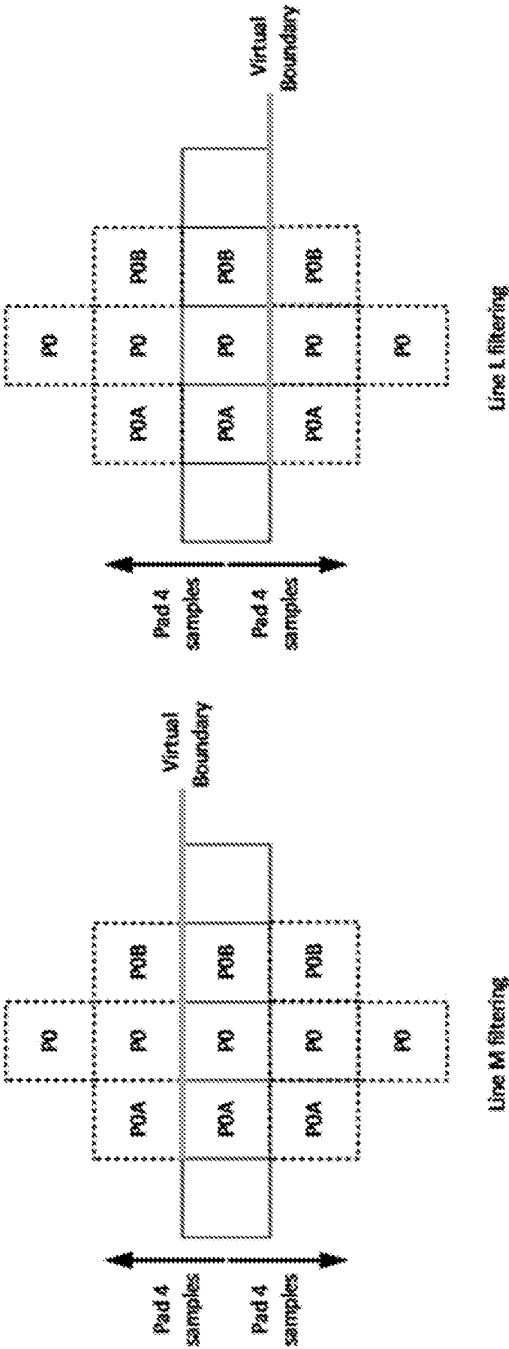
Modified luma ALF filtering at virtual boundary (7x7 diamond filter support, center is the current sample to be filtered)

FIG. 6C



Modified chroma ALF filtering at virtual boundary (5x5 diamond filter support, center is the current sample to be filtered)

FIG. 7A



Modified chroma ALF filtering at virtual boundary (5x5 diamond filter support, center is the current sample to be filtered)

FIG. 7B

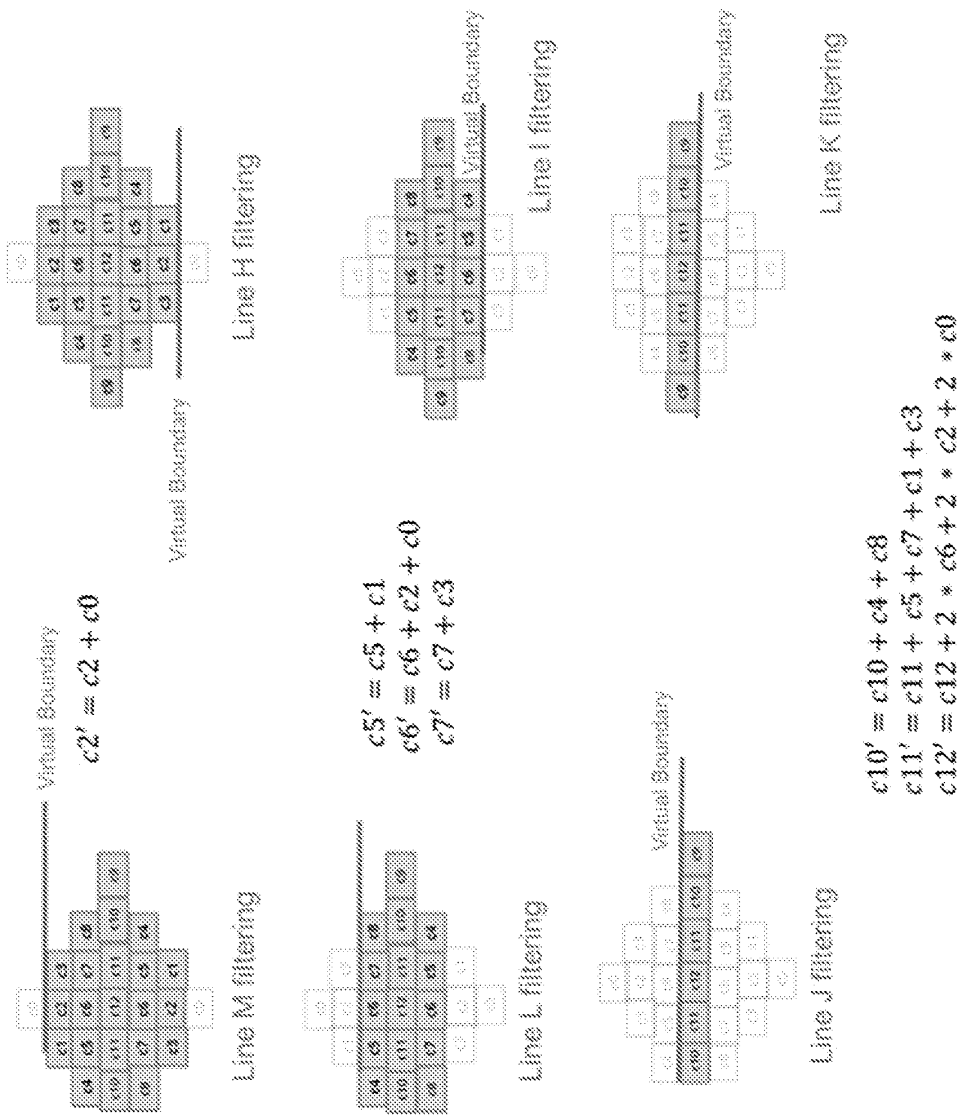
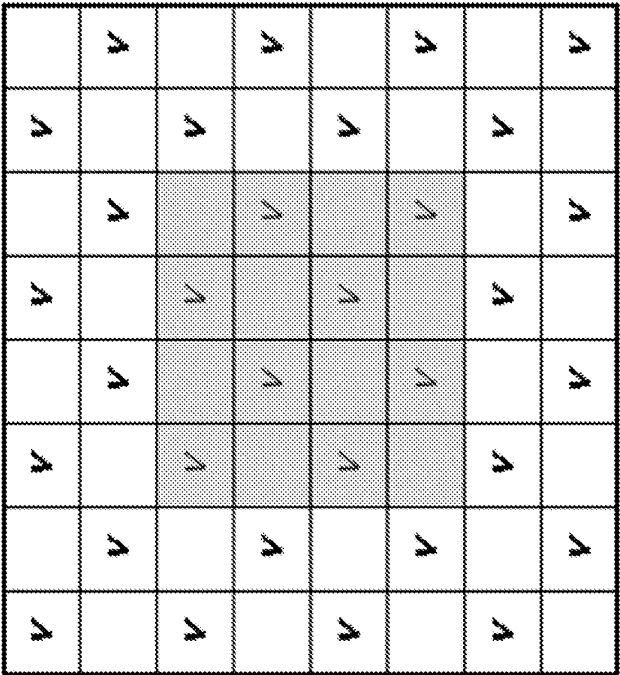
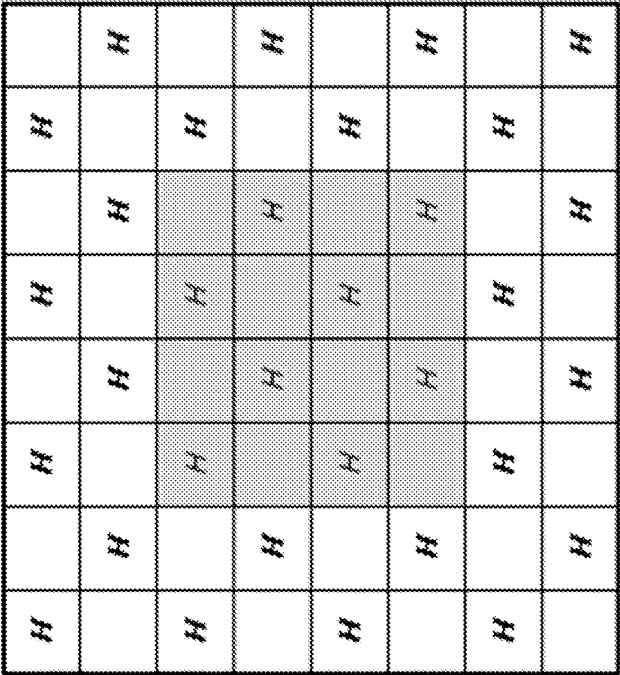


FIG. 8



Subsampled Laplacian calculation positions
for vertical gradient

FIG. 9A



Subsampled Laplacian calculation positions
for horizontal gradient

FIG. 9B

D1		D1		D1		D1	
	D1		D1		D1		D1
D1		D1		D1		D1	
	D1		D1		D1		D1
D1		D1		D1		D1	
	D1		D1		D1		D1
D1		D1		D1		D1	
	D1		D1		D1		D1

Subsampled Laplacian calculation positions for
diagonal gradient

FIG. 9C

D2		D2		D2		D2	
	D2		D2		D2		D2
D2		D2		D2		D2	
	D2		D2		D2		D2
D2		D2		D2		D2	
	D2		D2		D2		D2
D2		D2		D2		D2	
	D2		D2		D2		D2

Subsampled Laplacian calculation positions for
diagonal gradient

FIG. 9D

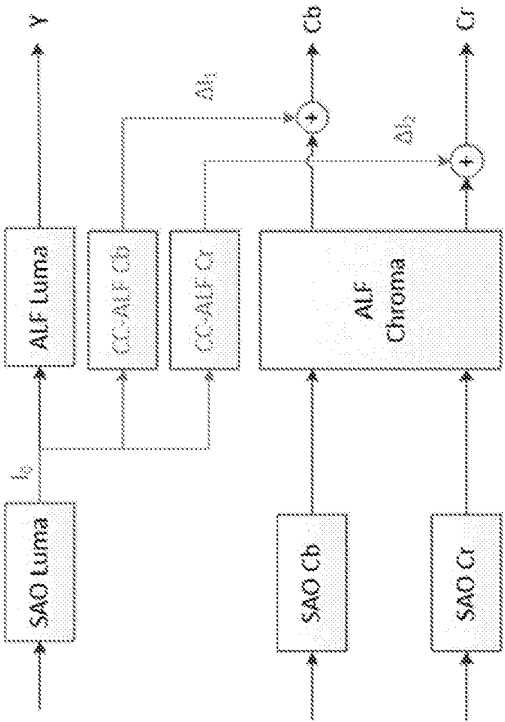


FIG. 10A

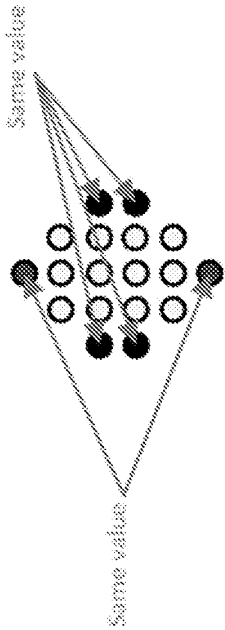
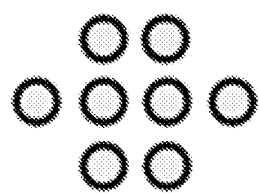
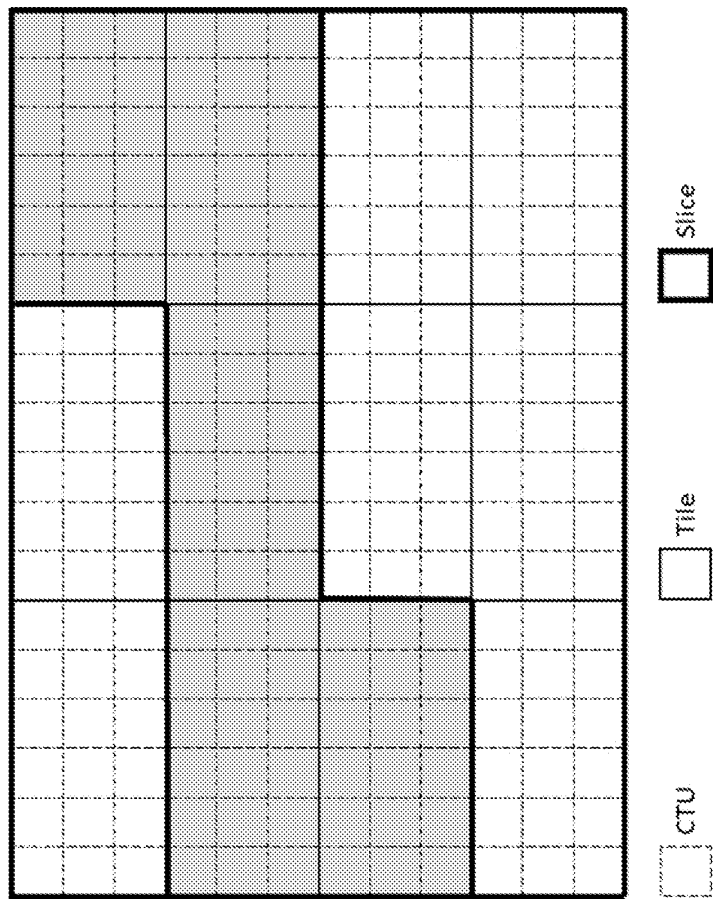


FIG. 10B



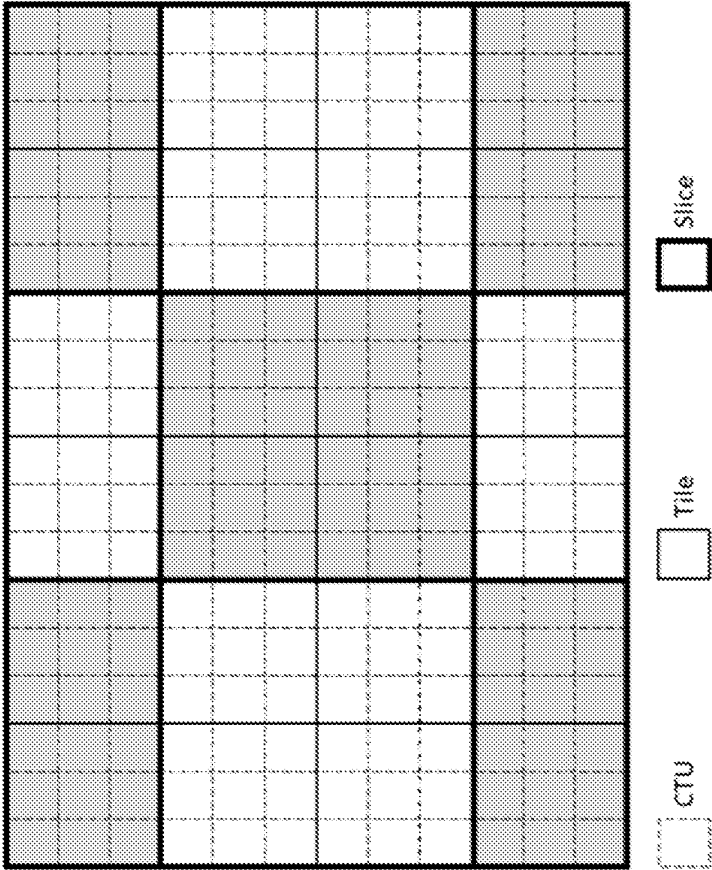
3x4 Diamond shaped filter

FIG. 11



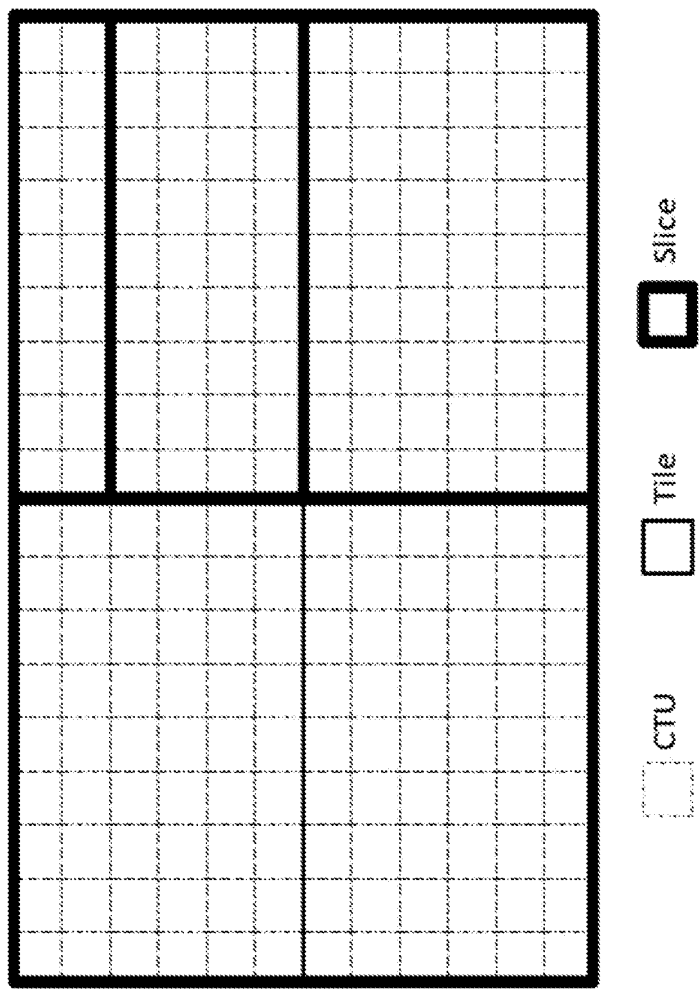
A picture with 18 by 12 luma CTUs that is partitioned into 12 tiles and 3 raster-scan slices (informative)

FIG. 12



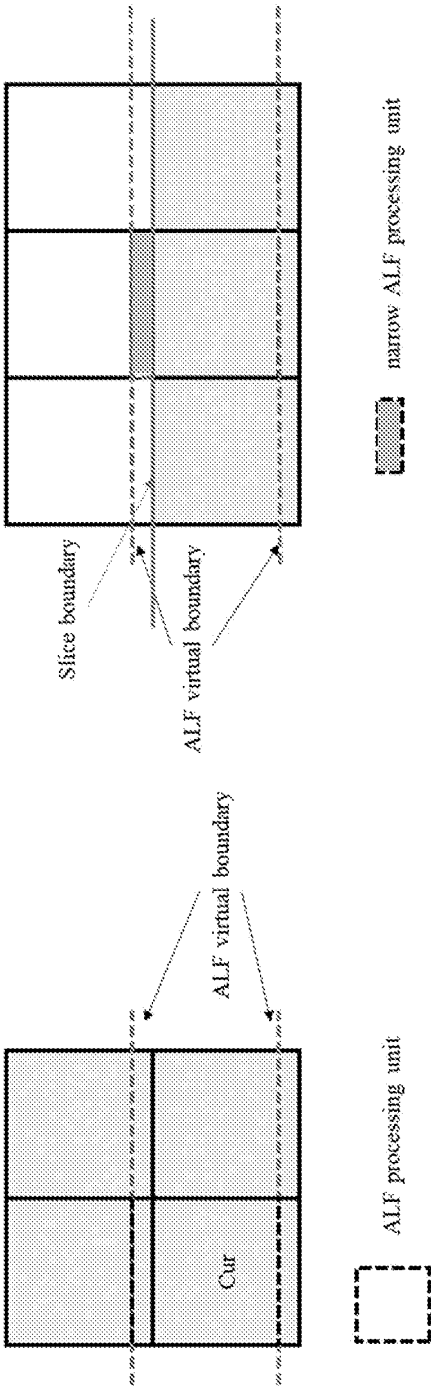
A picture with 18 by 12 luma CTUs that is partitioned into 24 tiles and 9 rectangular slices (informative)

FIG. 13



A picture that is partitioned into 4 titles and 4 rectangular slices (informative)

FIG. 14



Candidates for AF_MERGE

FIG. 16

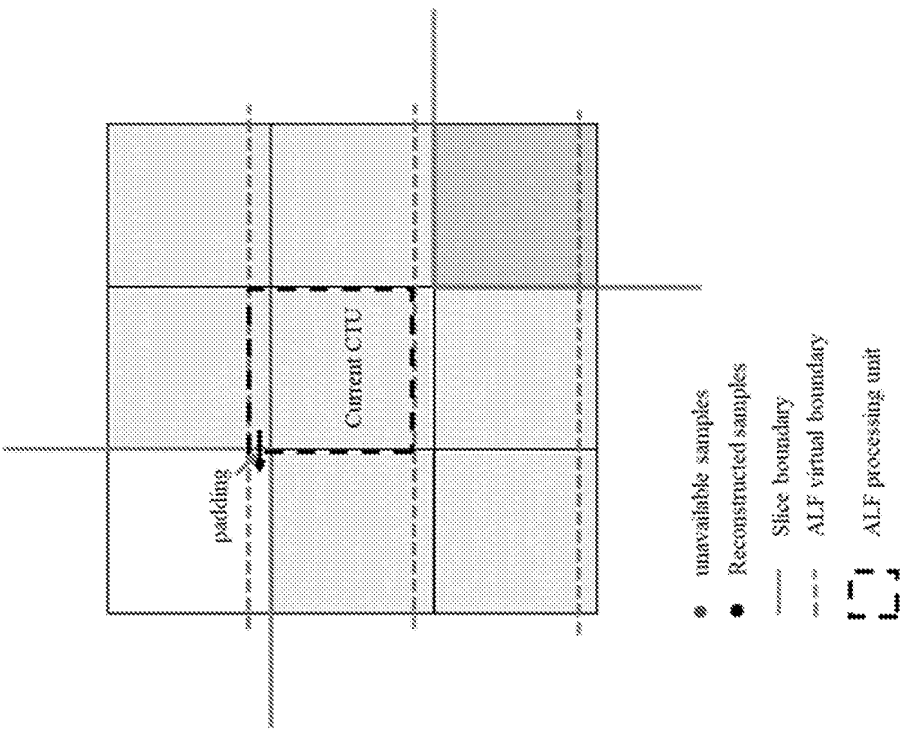


FIG. 17

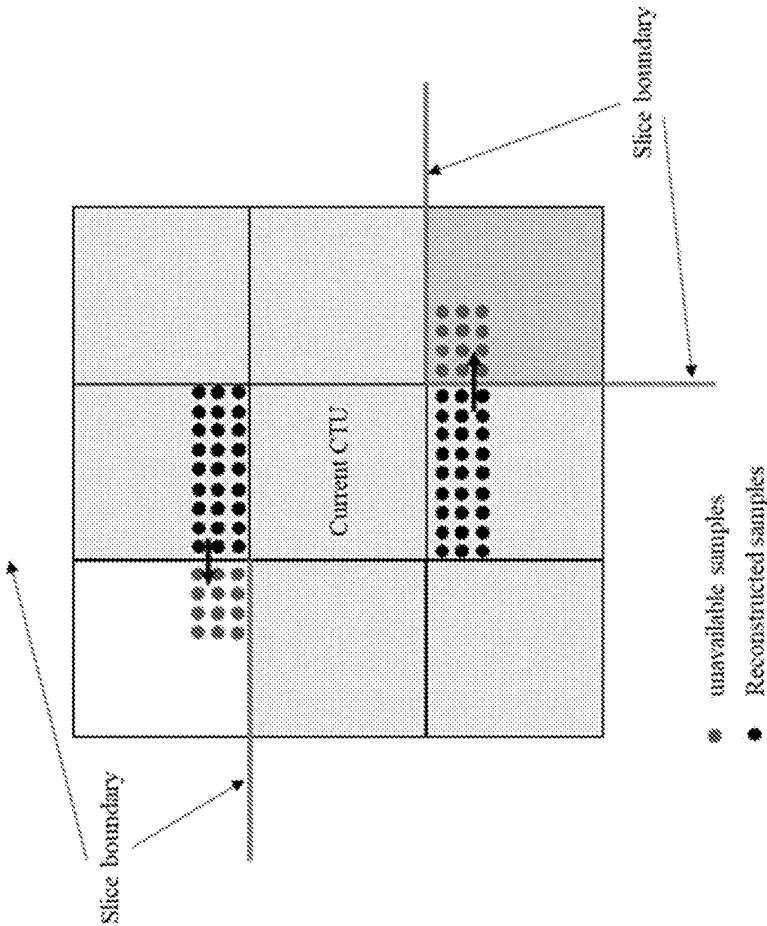


FIG. 18

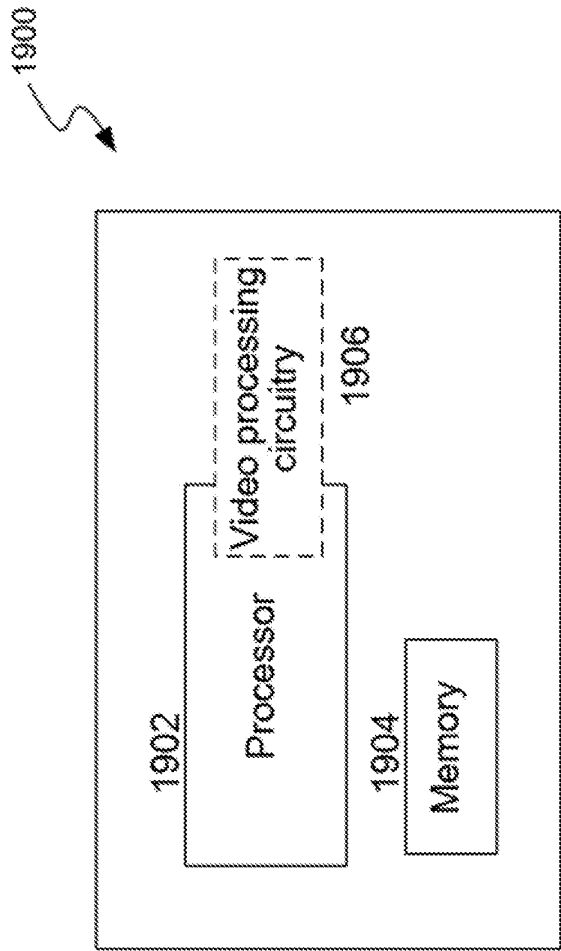


FIG. 19

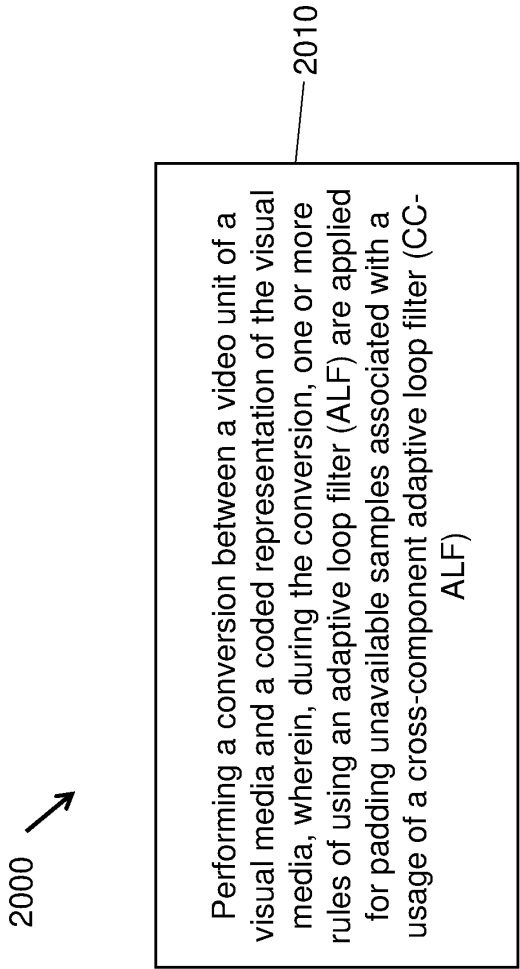


FIG. 20

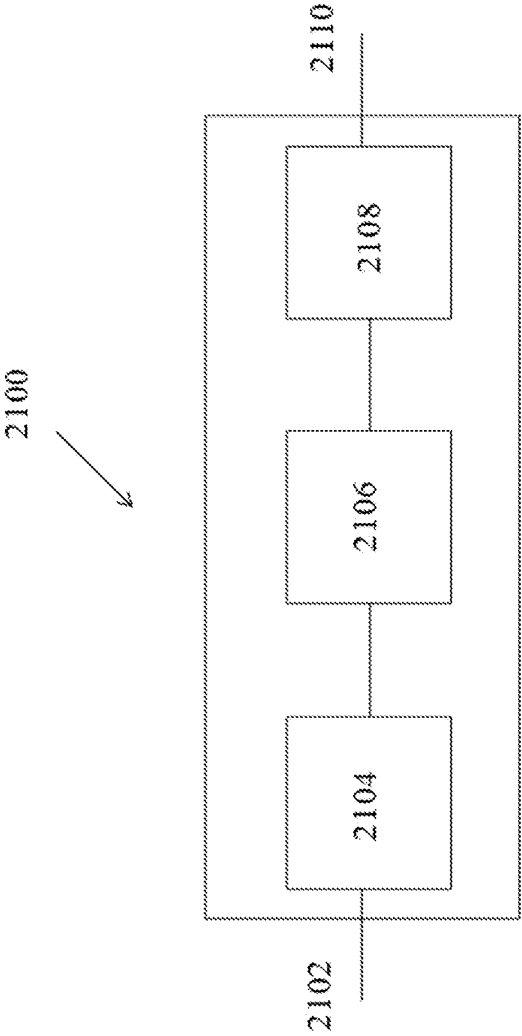


FIG. 21

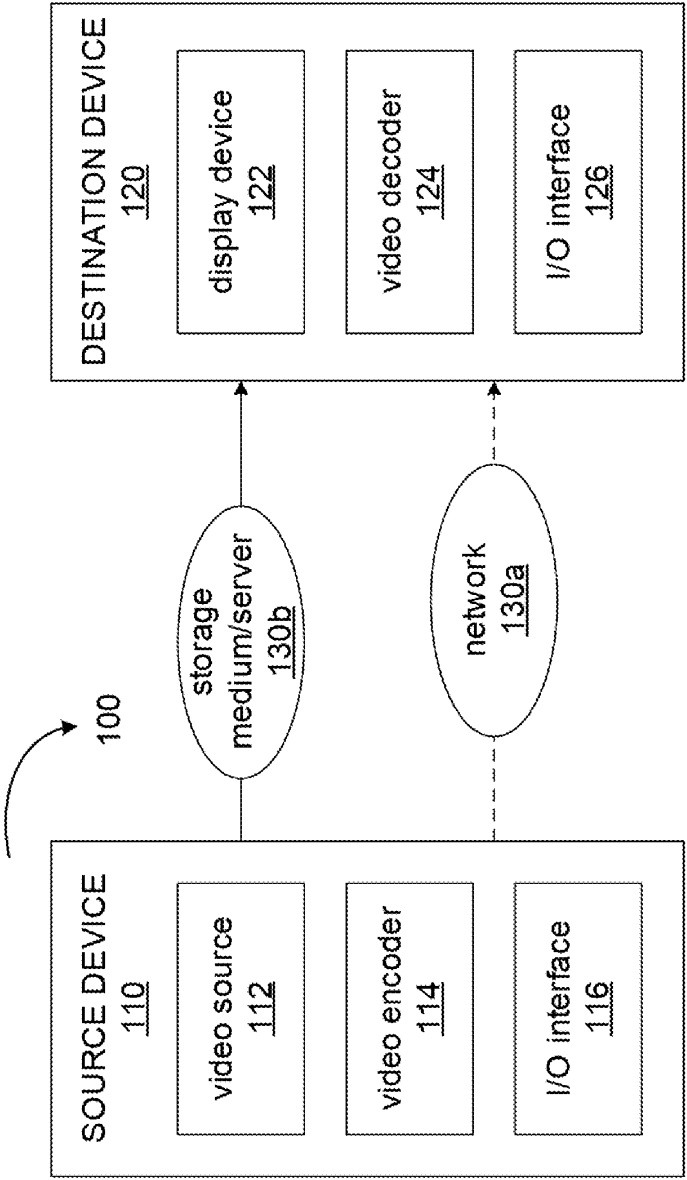


FIG. 22

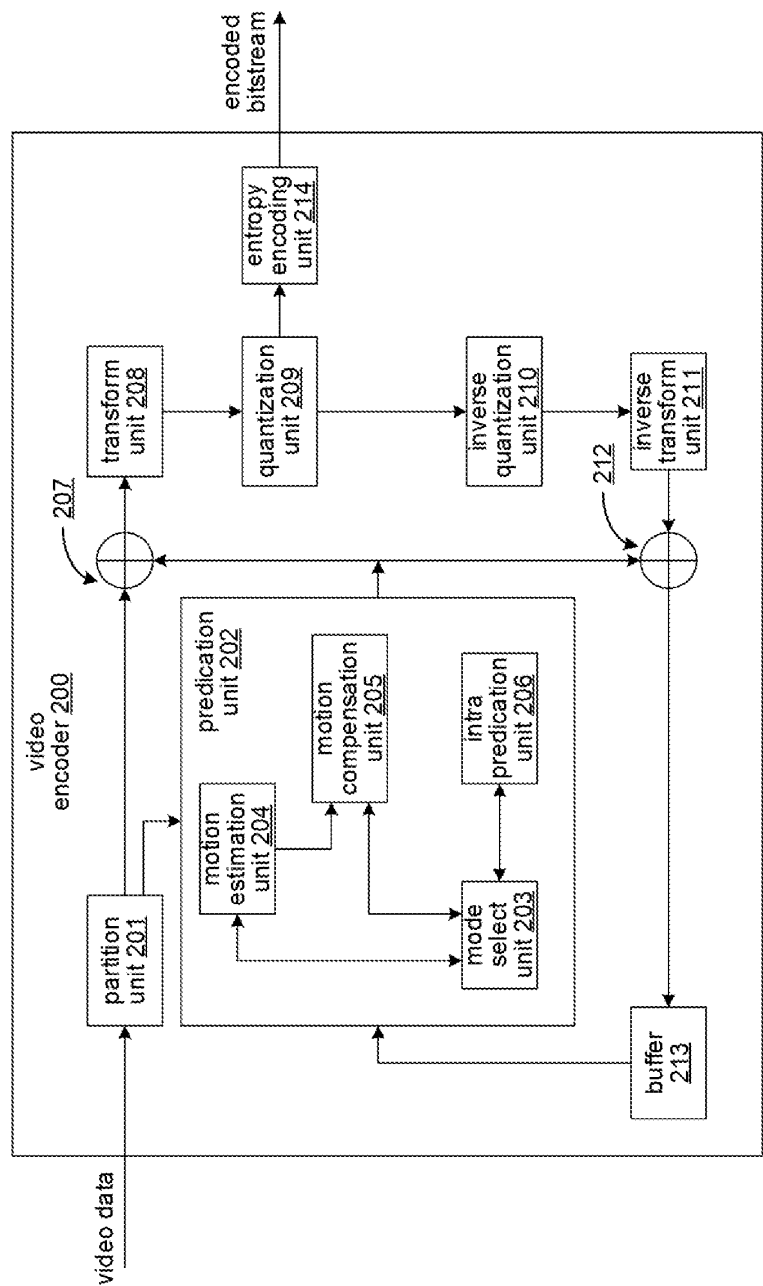


FIG. 23

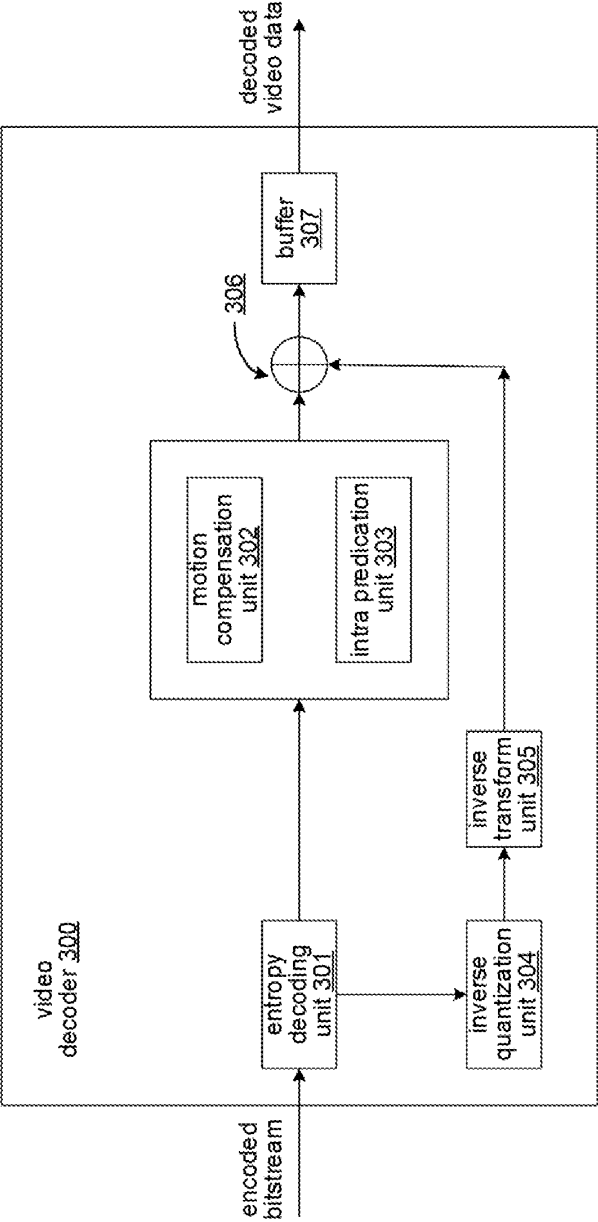


FIG. 24

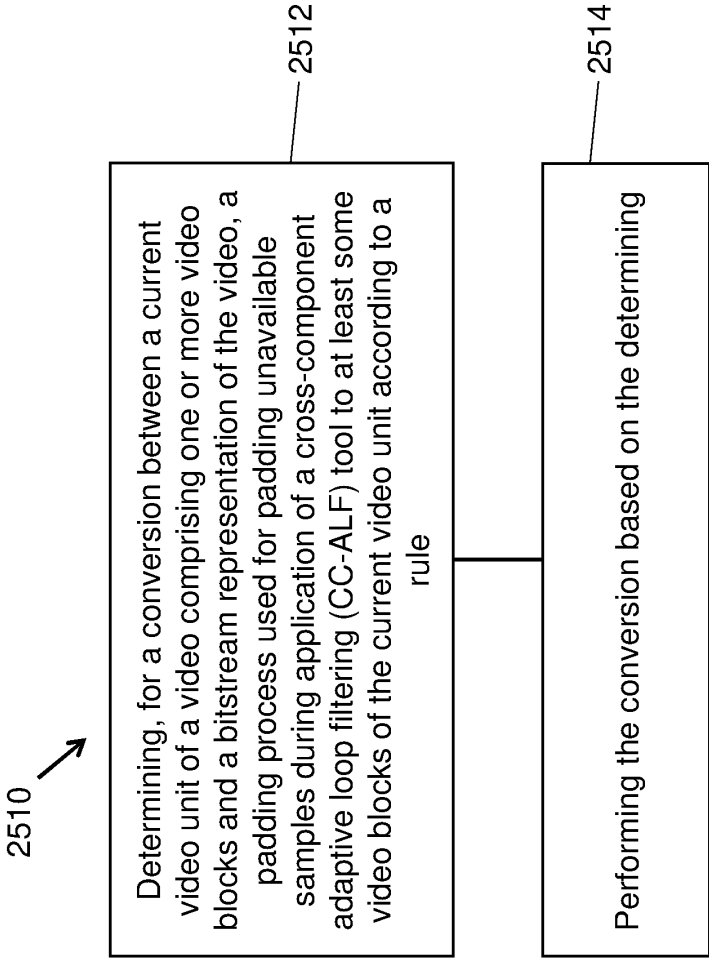


FIG. 25A

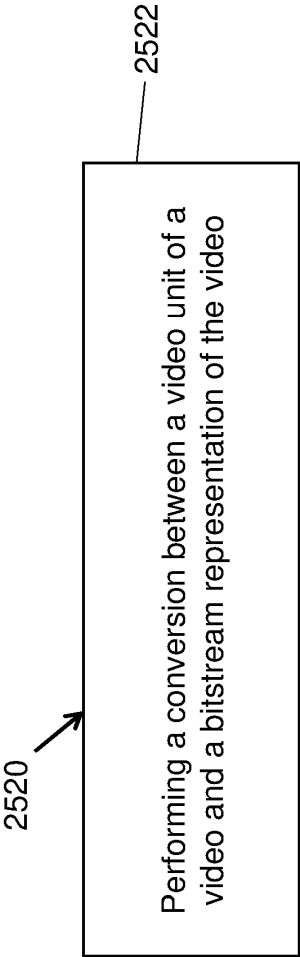


FIG. 25B

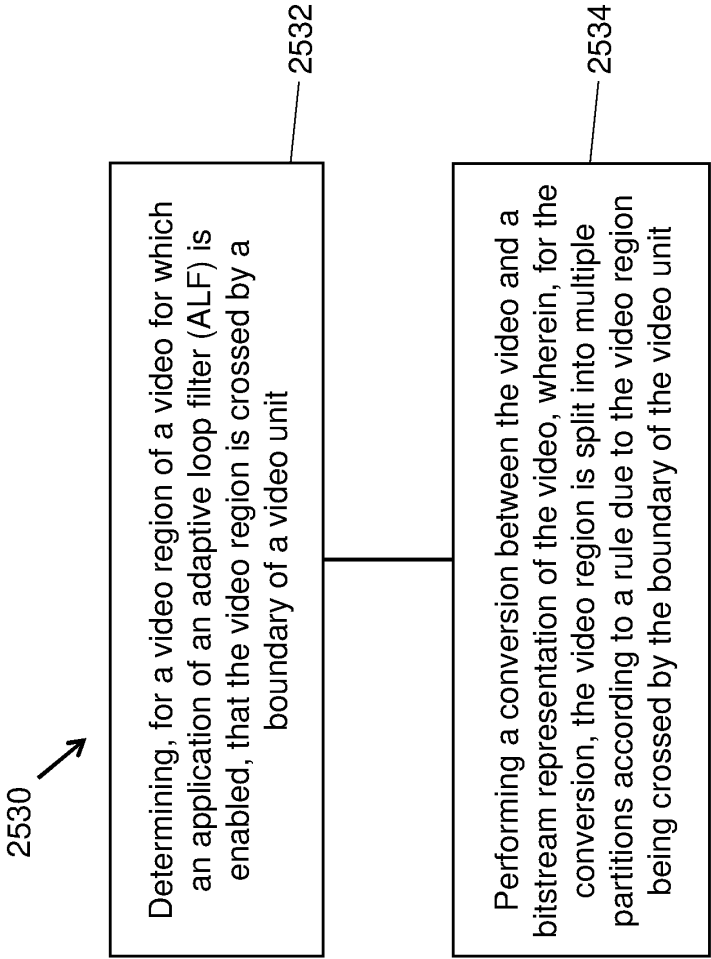


FIG. 25C

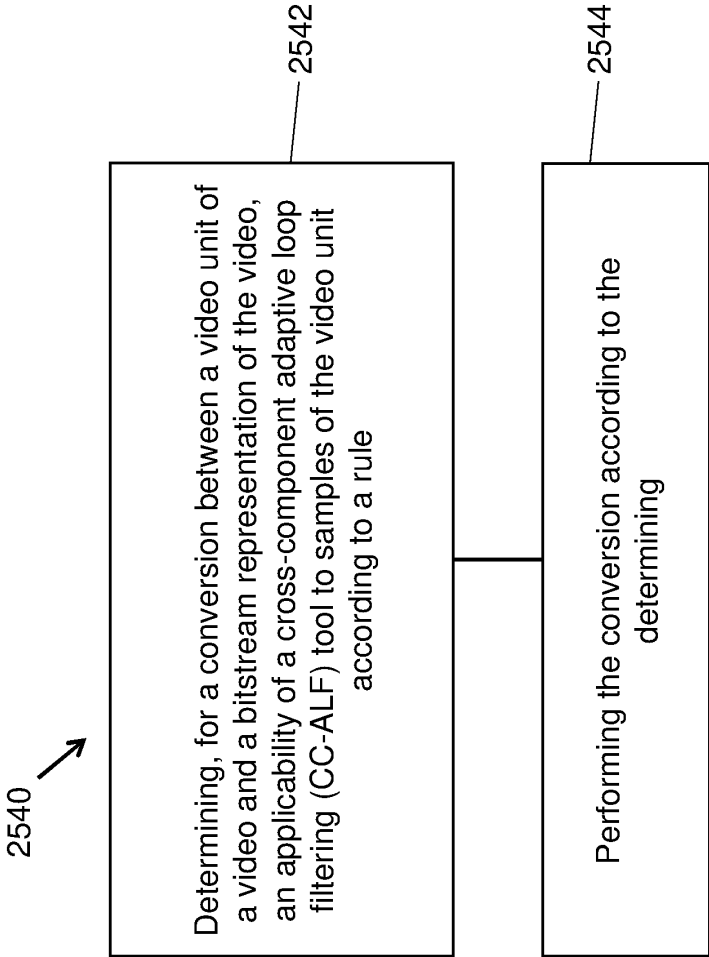


FIG. 25D

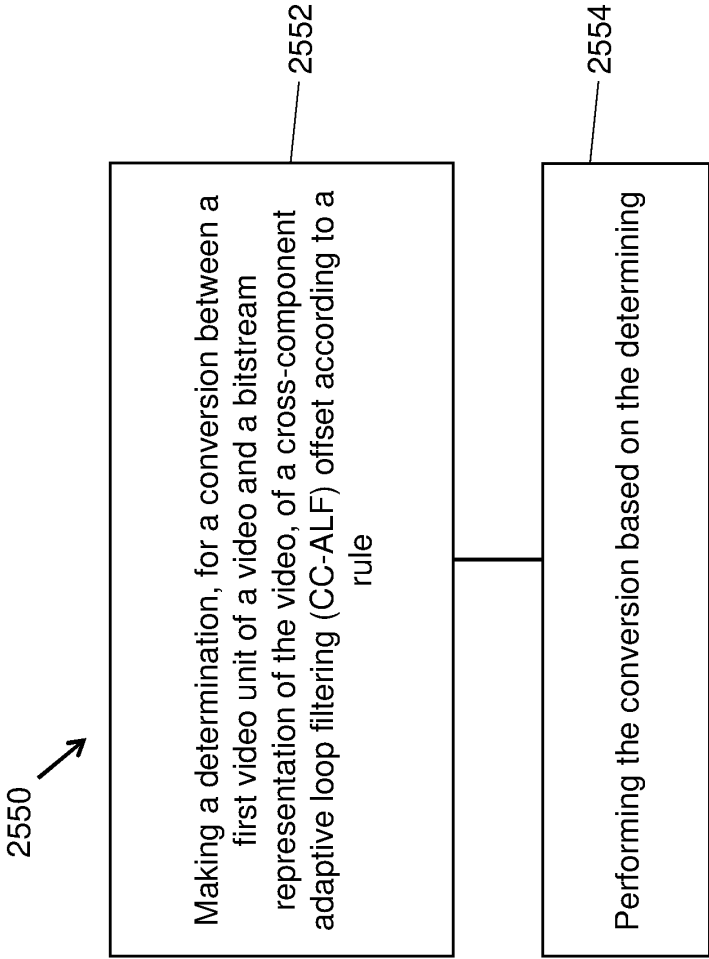


FIG. 25E

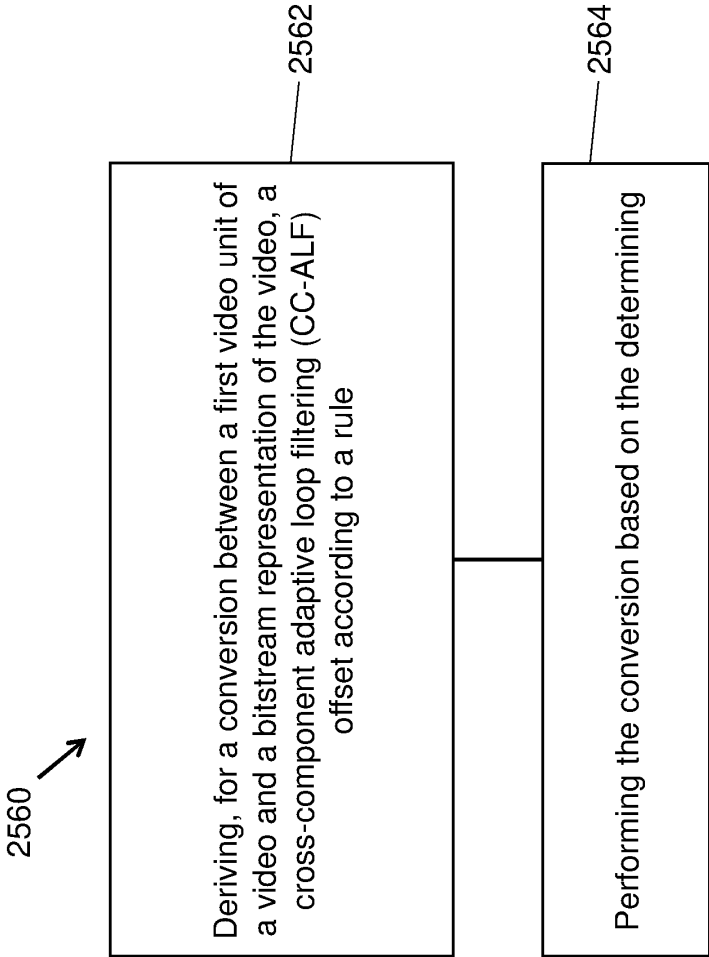


FIG. 25F

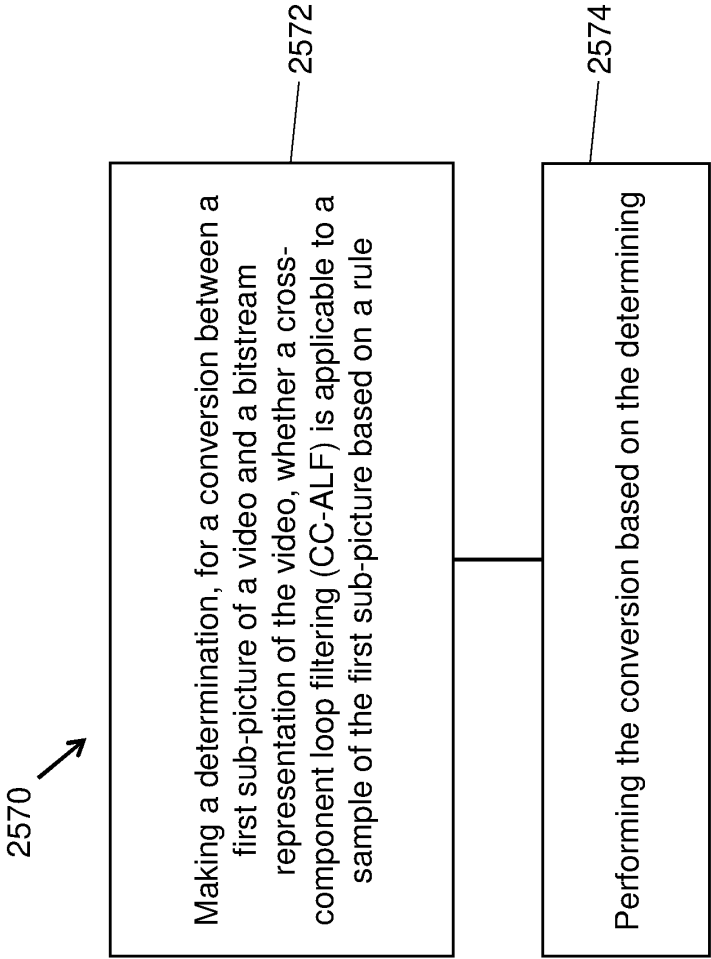


FIG. 25G