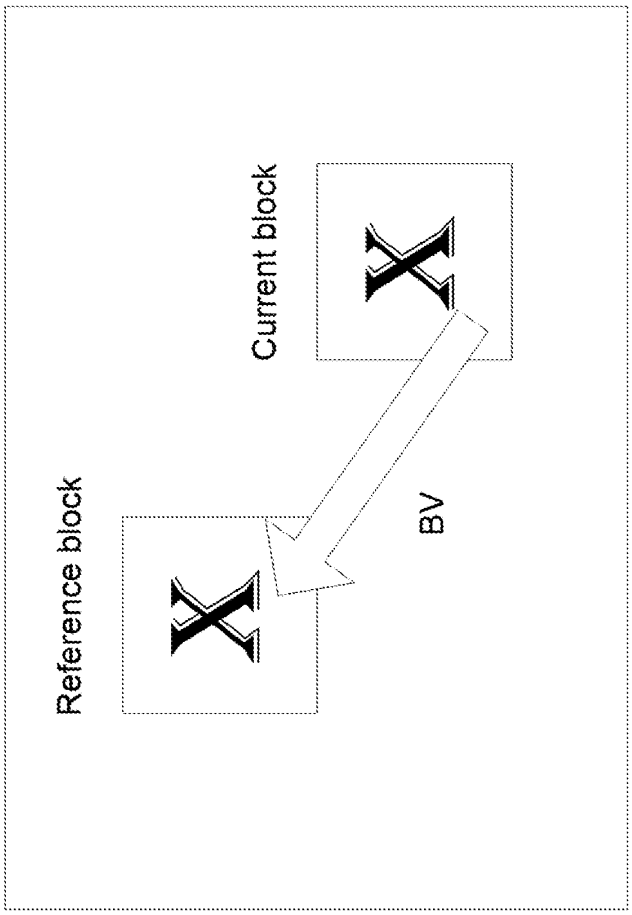

FIG. 1

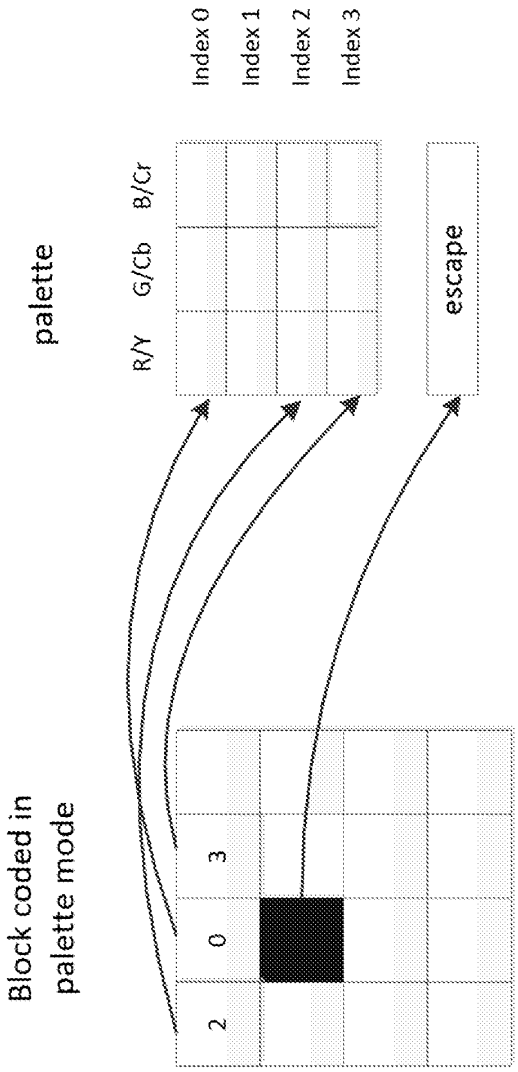
Block coded in palette mode
2
0
3
palette
R/Y
G/Cb
B/Cr
Index 0
Index 1
Index 2
Index 3
escape

FIG. 2

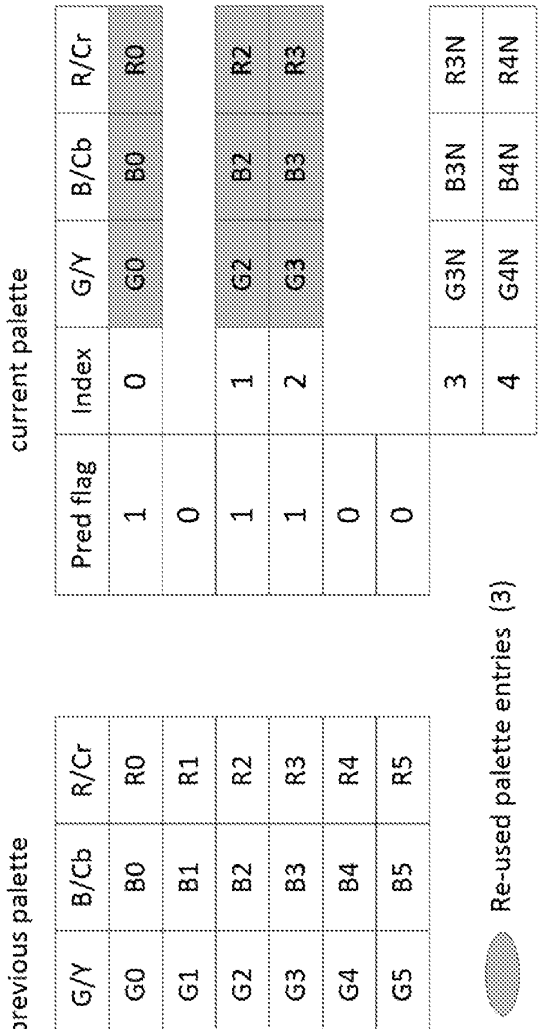
previous palette
Index G/Y B/Cb R/Cr
0 G0 B0 R0
1 G1 B1 R1
2 G2 B2 R2
3 G3 B3 R3
4 G4 B4 R4
5 G5 B5 R5
current palette
Pred flag Index G/Y B/Cb R/Cr
1 0 G0 B0 R0
0
1 1 G2 B2 R2
1 2 G3 B3 R3
0
0
3 G3N B3N R3N
4 G4N B4N R4N
Re-used palette entries (3)
New palette entries (2), signalled

FIG. 3

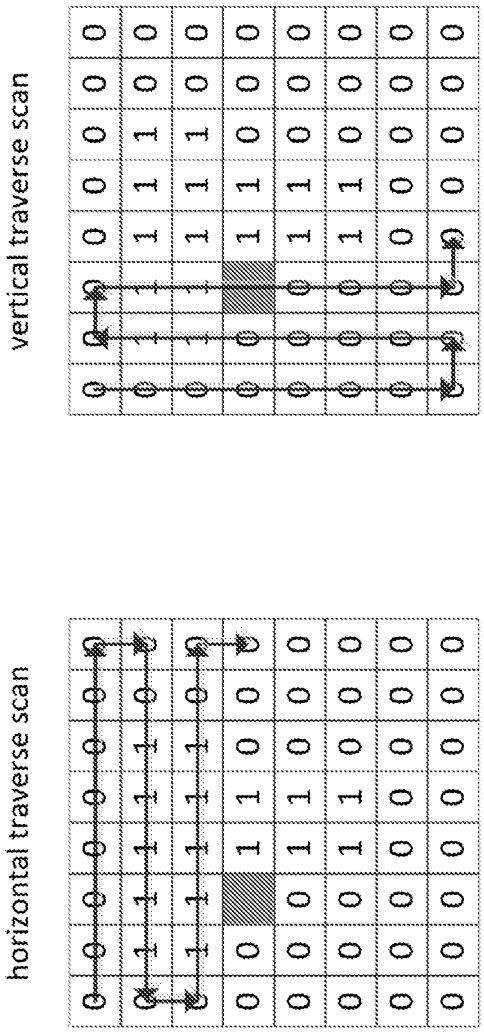

FIG. 4

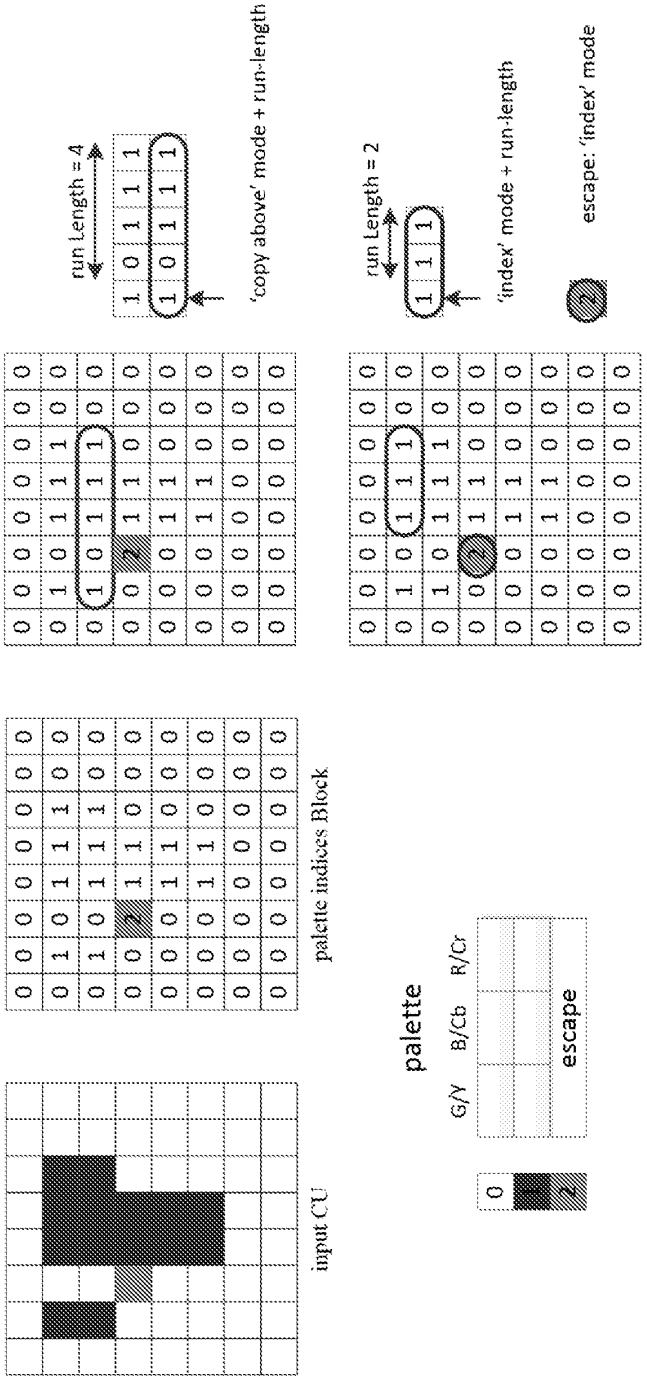
input CU
palette indices Block
palette
G/Y
B/Cb
R/Cr
escape
run Length = 4
'copy above' mode + run-length
run Length = 2
'index' mode + run-length
escape: 'index' mode

FIG. 5

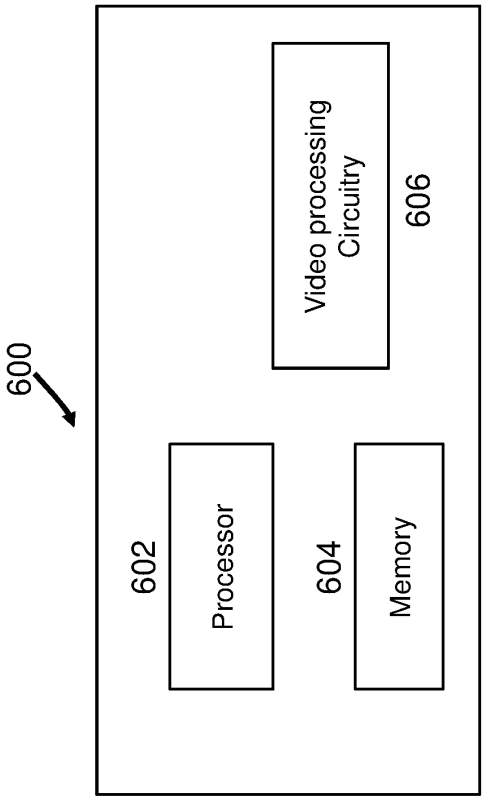
600
602
Processor
604
Memory
606
Video processing Circuitry

FIG. 6

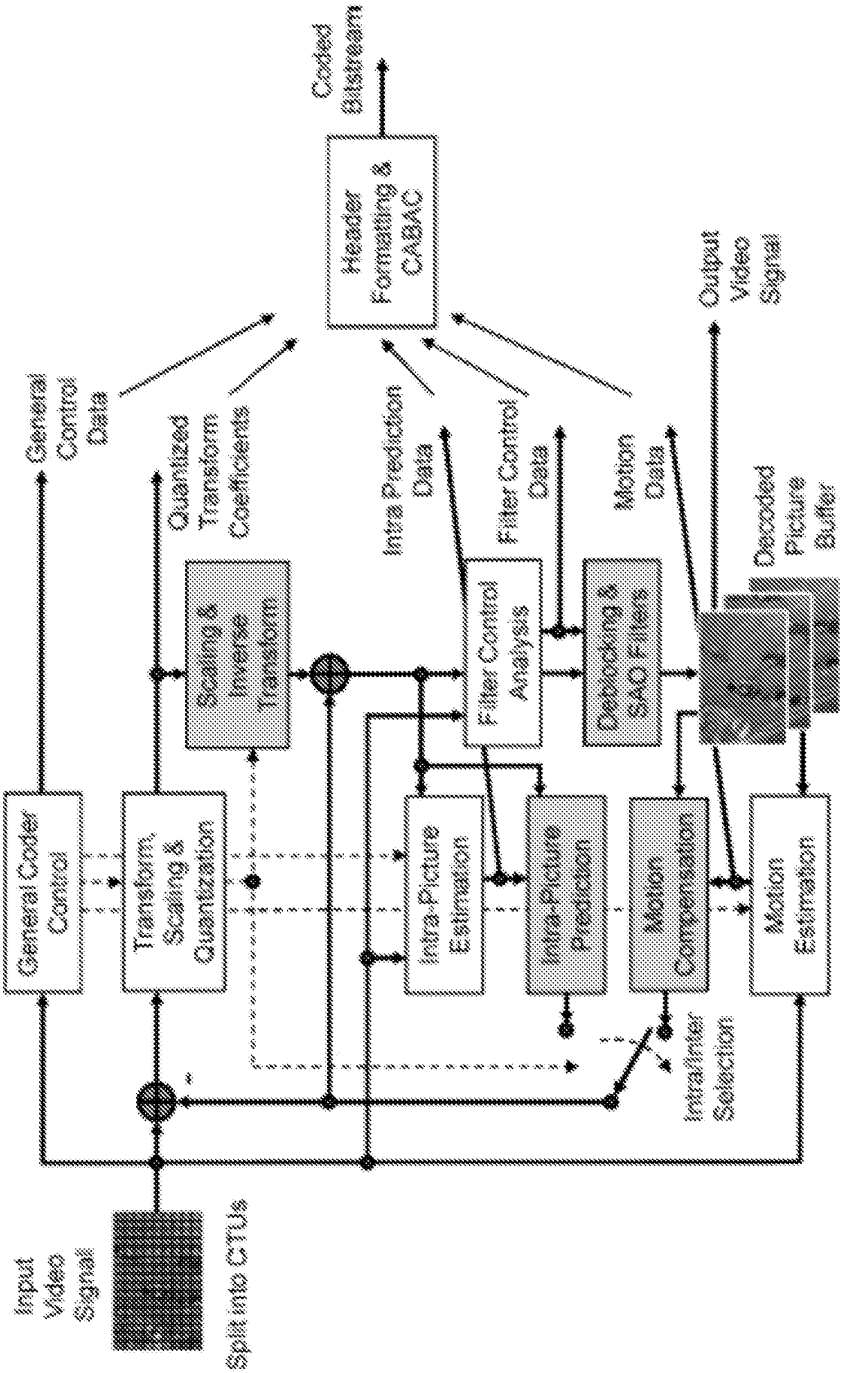
Coded Bitstream
Header Formatting & CABAC
Output Video Signal
General Control Data
Quantized Transform Coefficients
Intra Prediction Data
Filter Control Data
Motion Data
Decoded Picture Buffer
Scaling & Inverse Transform
Filter Control Analysis
Deblocking & SAO Filters
General Coder Control
Transform, Scaling & Quantization
Intra-Picture Estimation
Intra-Picture Prediction
Motion Compensation
Motion Estimation
Intra/Inter Selection
Input Video Signal
Split into CTUs

FIG. 7

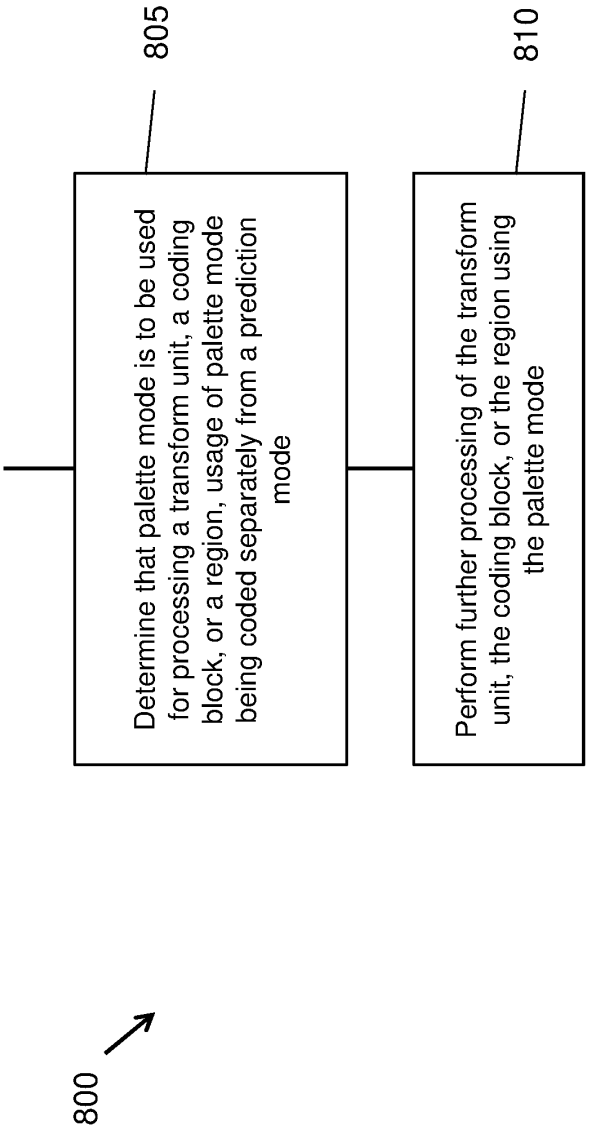
800
805
Determine that palette mode is to be used for processing a transform unit, a coding block, or a region, usage of palette mode being coded separately from a prediction mode
810
Perform further processing of the transform unit, the coding block, or the region using the palette mode

FIG. 8

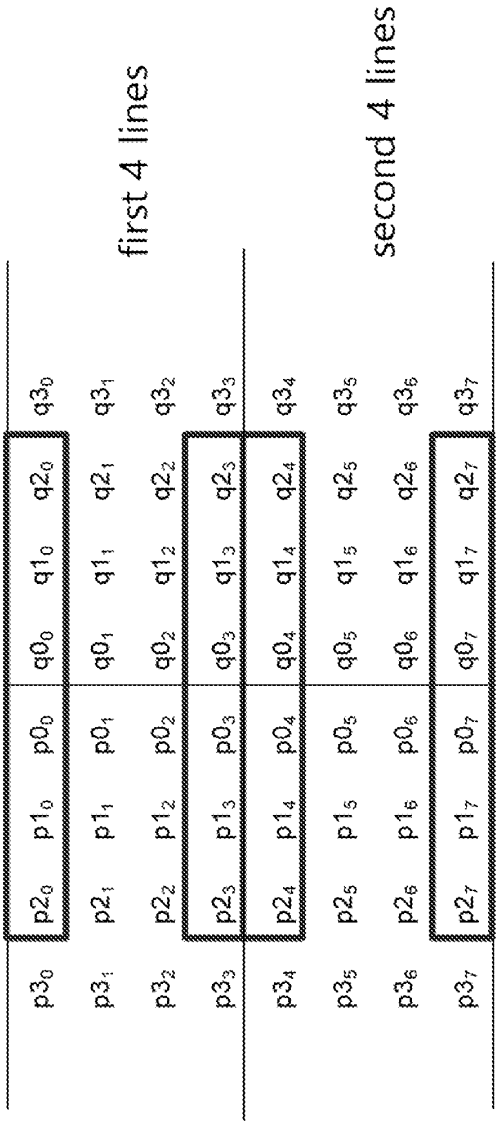
first 4 lines
second 4 lines
p3₀ p2₀ p1₀ p0₀ q0₀ q1₀ q2₀ q3₀
p3₁ p2₁ p1₁ p0₁ q0₁ q1₁ q2₁ q3₁
p3₂ p2₂ p1₂ p0₂ q0₂ q1₂ q2₂ q3₂
p3₃ p2₃ p1₃ p0₃ q0₃ q1₃ q2₃ q3₃
p3₄ p2₄ p1₄ p0₄ q0₄ q1₄ q2₄ q3₄
p3₅ p2₅ p1₅ p0₅ q0₅ q1₅ q2₅ q3₅
p3₆ p2₆ p1₆ p0₆ q0₆ q1₆ q2₆ q3₆
p3₇ p2₇ p1₇ p0₇ q0₇ q1₇ q2₇ q3₇

FIG. 9

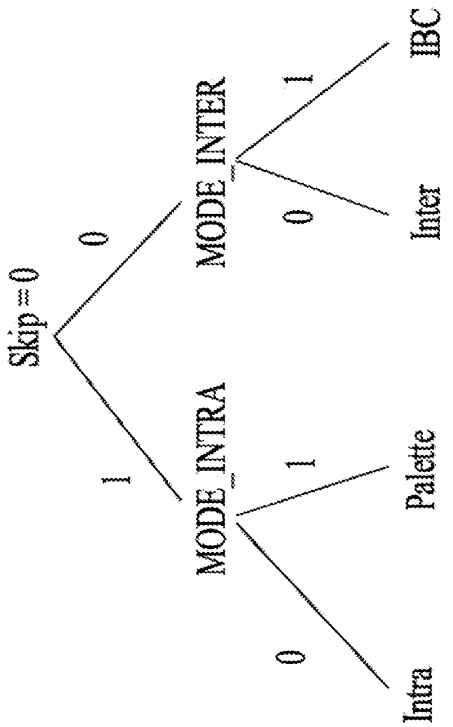

FIG. 10

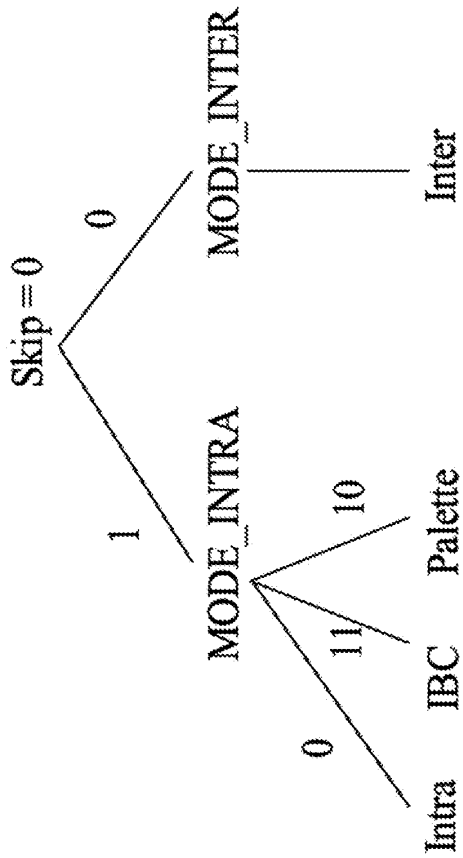
Skip = 0
0
1
MODE_INTER
Inter
MODE_INTRA
0
10
11
Intra
IBC
Palette

FIG. 11

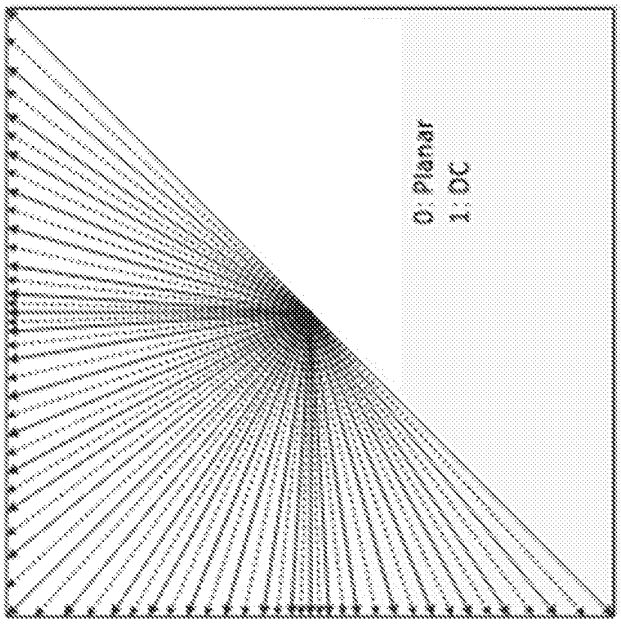

FIG. 12

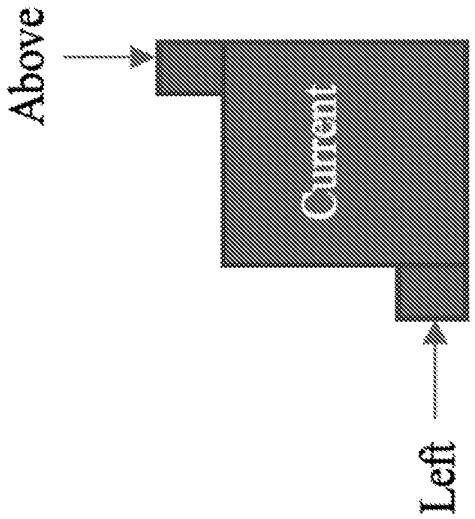

FIG. 13

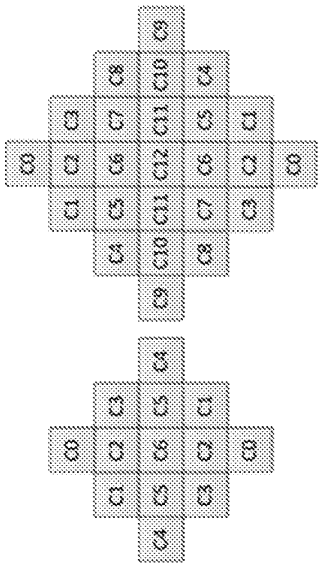
C9
C8 C10 C4
C3 C7 C11 C5 C1
C0 C2 C6 C12 C9 C2 C0
C1 C5 C11 C7 C3
C4 C10 C8
C9
C4
C3 C5 C1
C0 C2 C6 C3 C0
C1 C5 C3
C4

FIG. 14

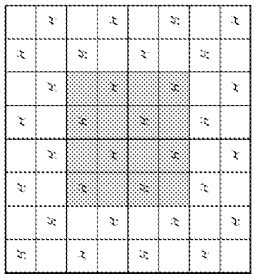

FIG. 15 (b)

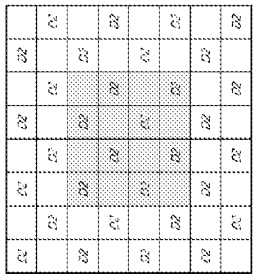

FIG. 15 (d)

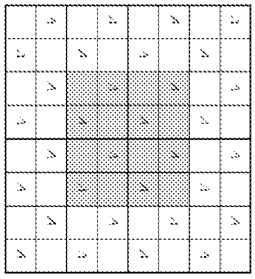

FIG. 15 (a)

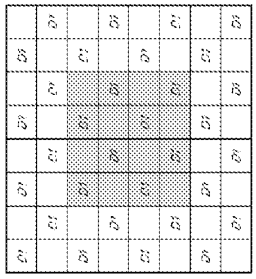

FIG. 15 (c)

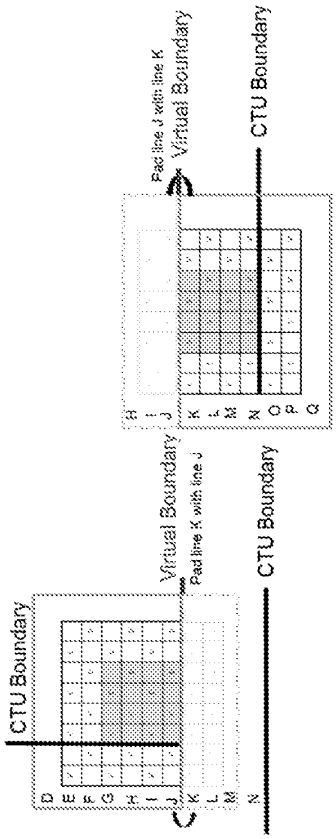
CTU Boundary
Virtual Boundary
Pad line K with line J
CTU Boundary
Pad line J with line K
Virtual Boundary
CTU Boundary

FIG. 16

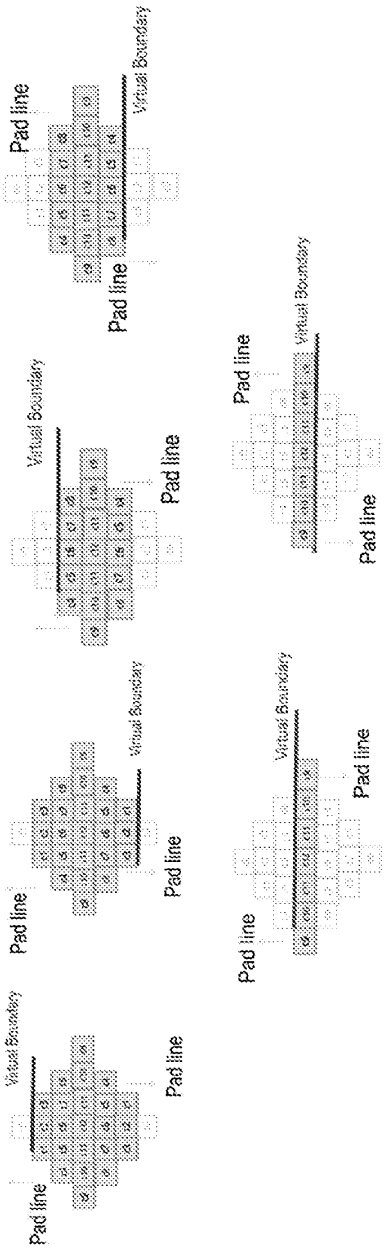
Pad line
Virtual Boundary
Pad line
Pad line
Virtual Boundary
Pad line
Pad line
Virtual Boundary
Pad line
Pad line
Virtual Boundary
Pad line
Pad line
Virtual Boundary
Pad line

FIG. 17

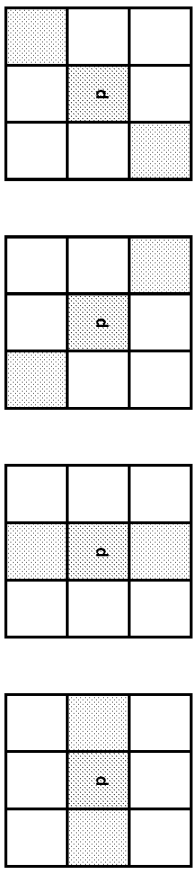

FIG. 18

Starting band position
Minimum pixel value
Signal four offsets from starting band
Maximum pixel value

FIG. 19

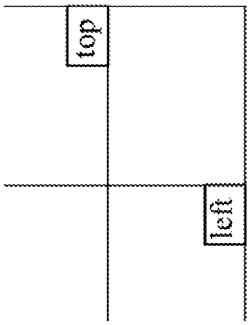

FIG. 20

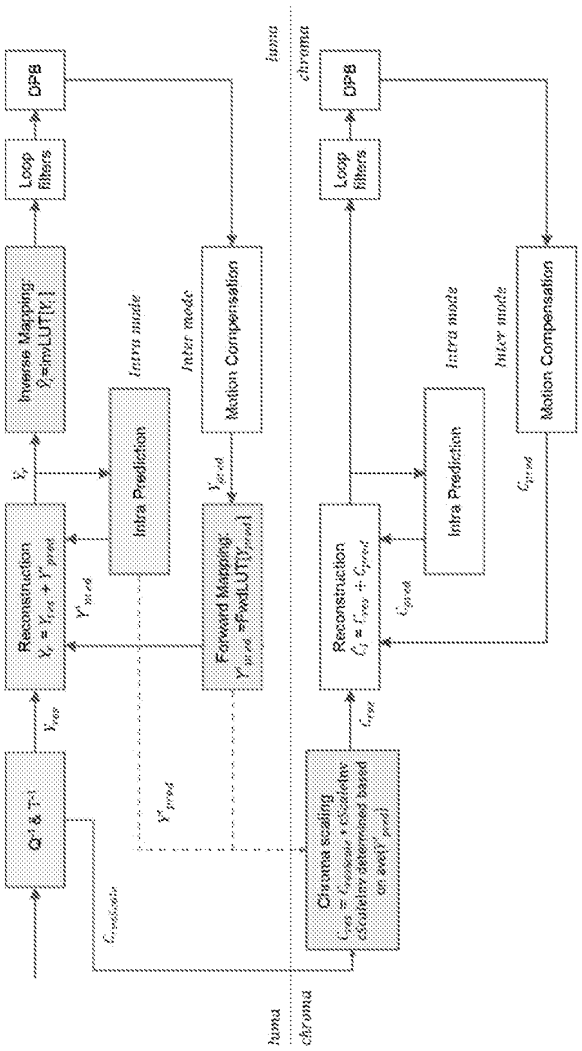
luma
chroma
DPB
Loop filters
Inverse Mapping
Intra mode
Inter mode
Motion Compensation
Intra Prediction
Reconstruction
Forward Mapping
Chroma scaling
luma
chroma

FIG. 21

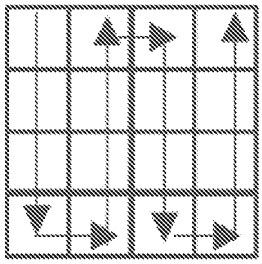

FIG. 22

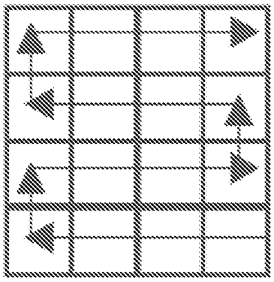

FIG. 23

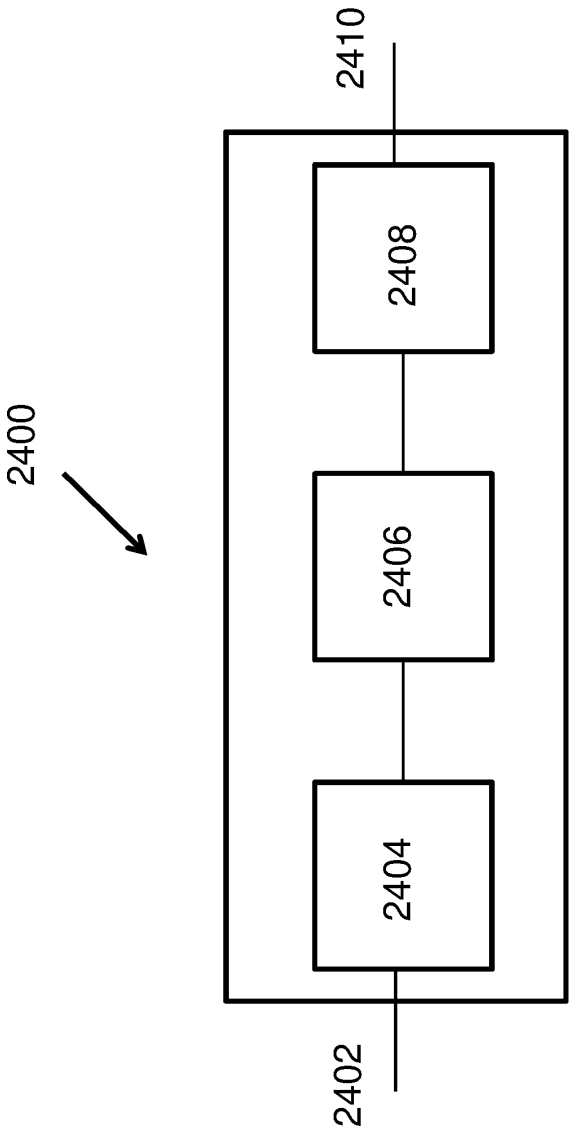

FIG. 24

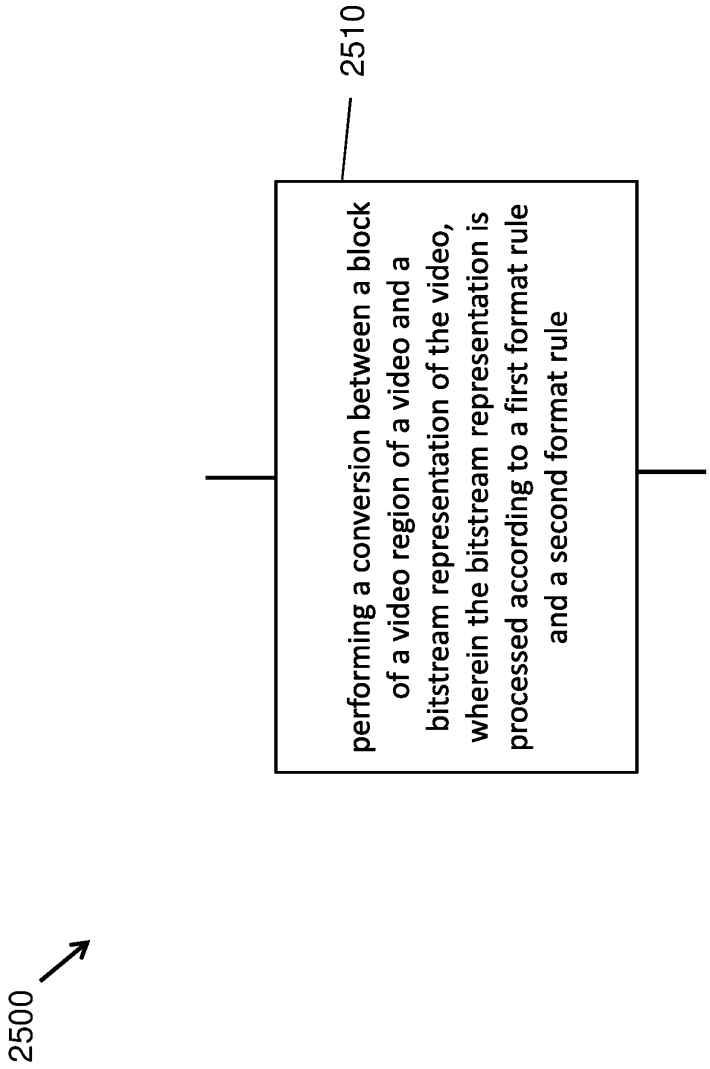
2500
2510
performing a conversion between a block of a video region of a video and a bitstream representation of the video, wherein the bitstream representation is processed according to a first format rule and a second format rule

FIG. 25

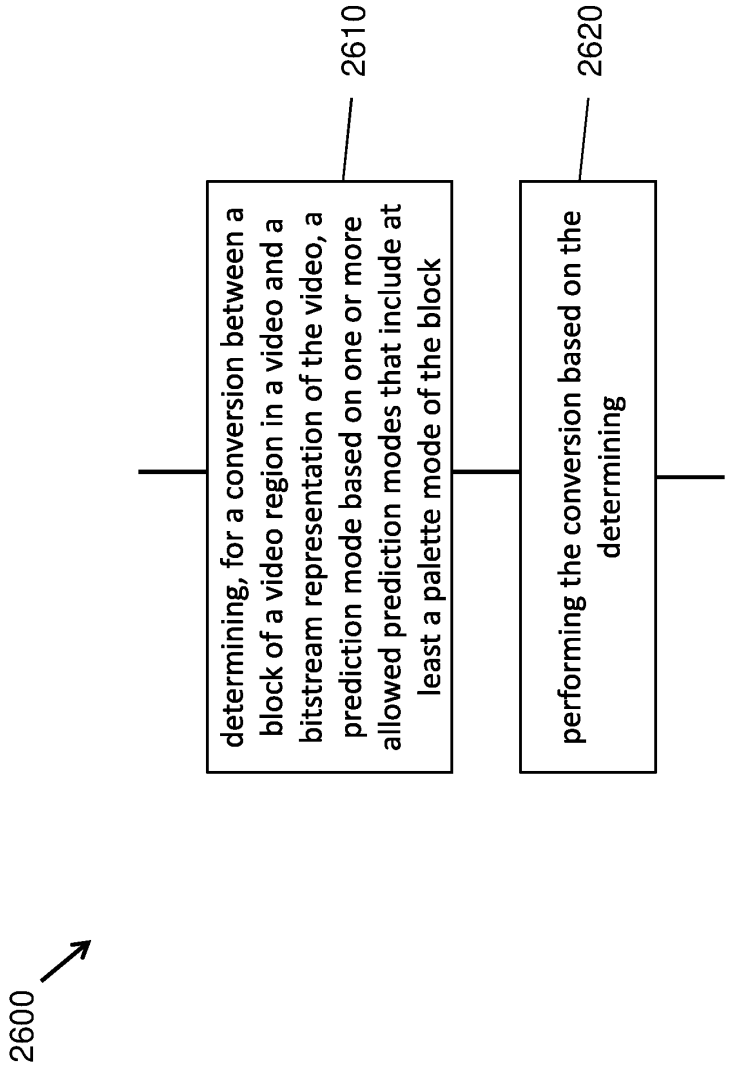
2600
2610
determining, for a conversion between a block of a video region in a video and a bitstream representation of the video, a prediction mode based on one or more allowed prediction modes that include at least a palette mode of the block
2620
performing the conversion based on the determining

FIG. 26

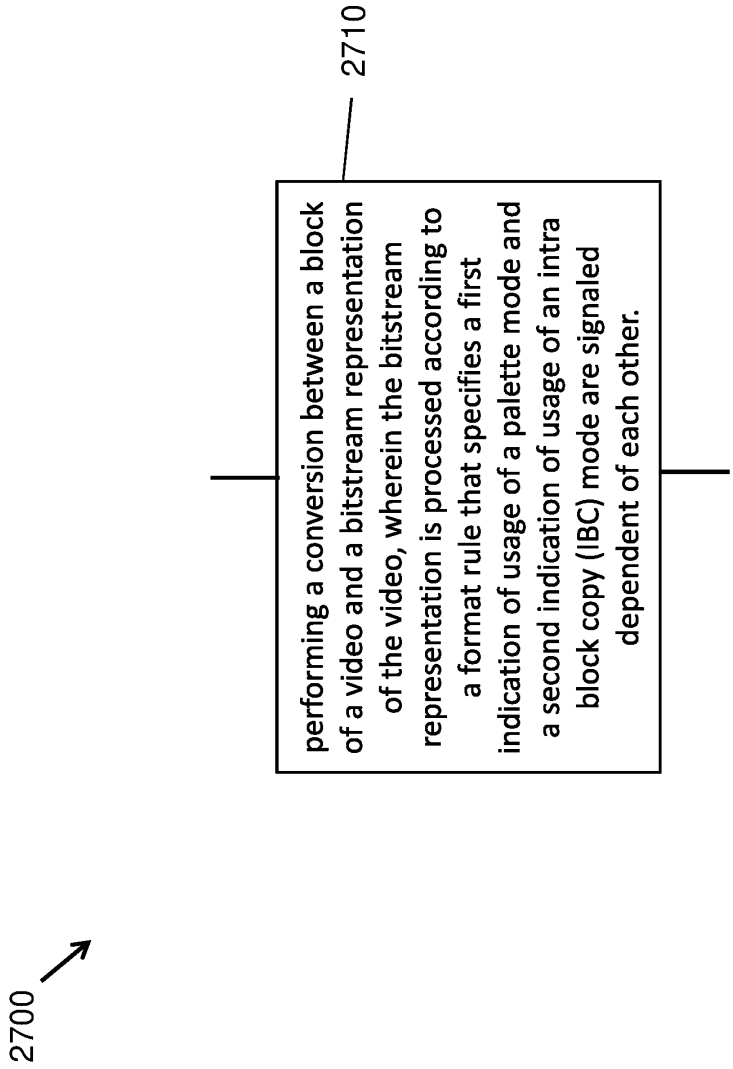
2700
2710
performing a conversion between a block of a video and a bitstream representation of the video, wherein the bitstream representation is processed according to a format rule that specifies a first indication of usage of a palette mode and a second indication of usage of an intra block copy (IBC) mode are signaled dependent of each other.

FIG. 27

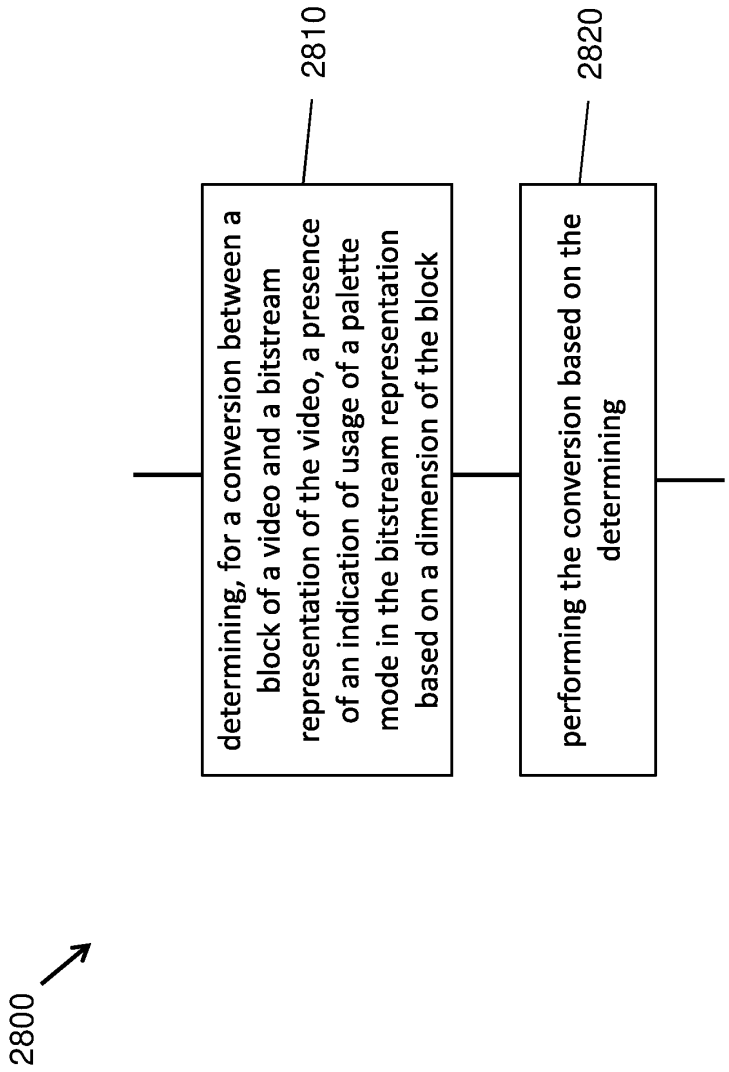
2800
2810
determining, for a conversion between a block of a video and a bitstream representation of the video, a presence of an indication of usage of a palette mode in the bitstream representation based on a dimension of the block
2820
performing the conversion based on the determining

FIG. 28

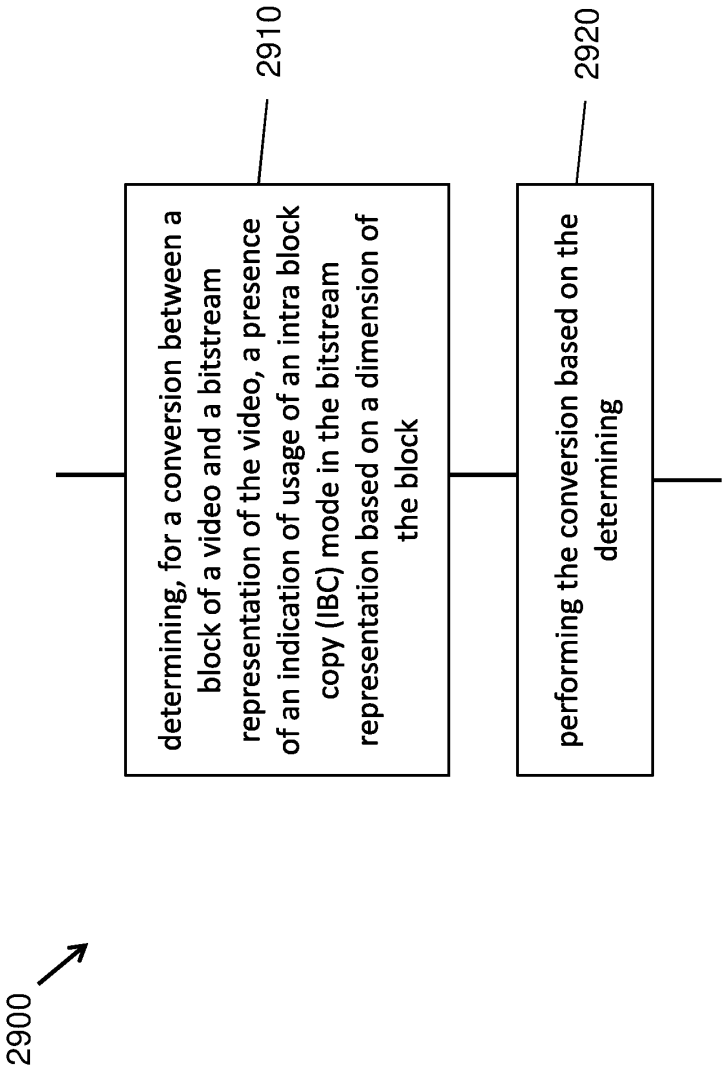
2900
2910
determining, for a conversion between a block of a video and a bitstream representation of the video, a presence of an indication of usage of an intra block copy (IBC) mode in the bitstream representation based on a dimension of the block
2920
performing the conversion based on the determining

FIG. 29

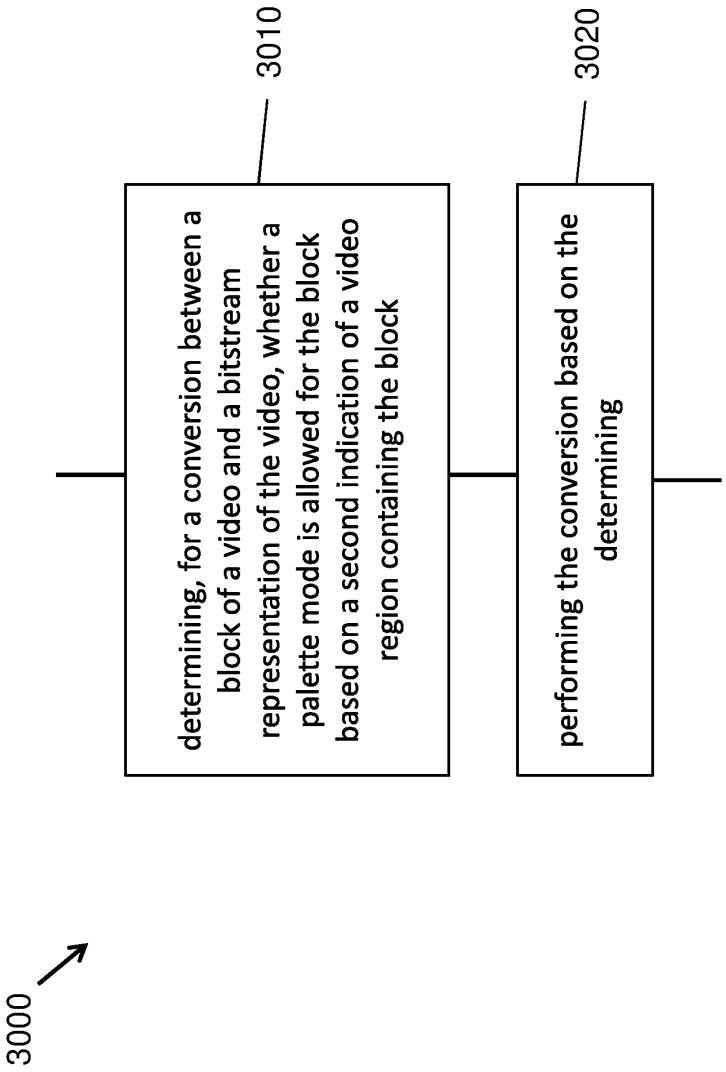
3000
3010
determining, for a conversion between a block of a video and a bitstream representation of the video, whether a palette mode is allowed for the block based on a second indication of a video region containing the block
3020
performing the conversion based on the determining

FIG. 30

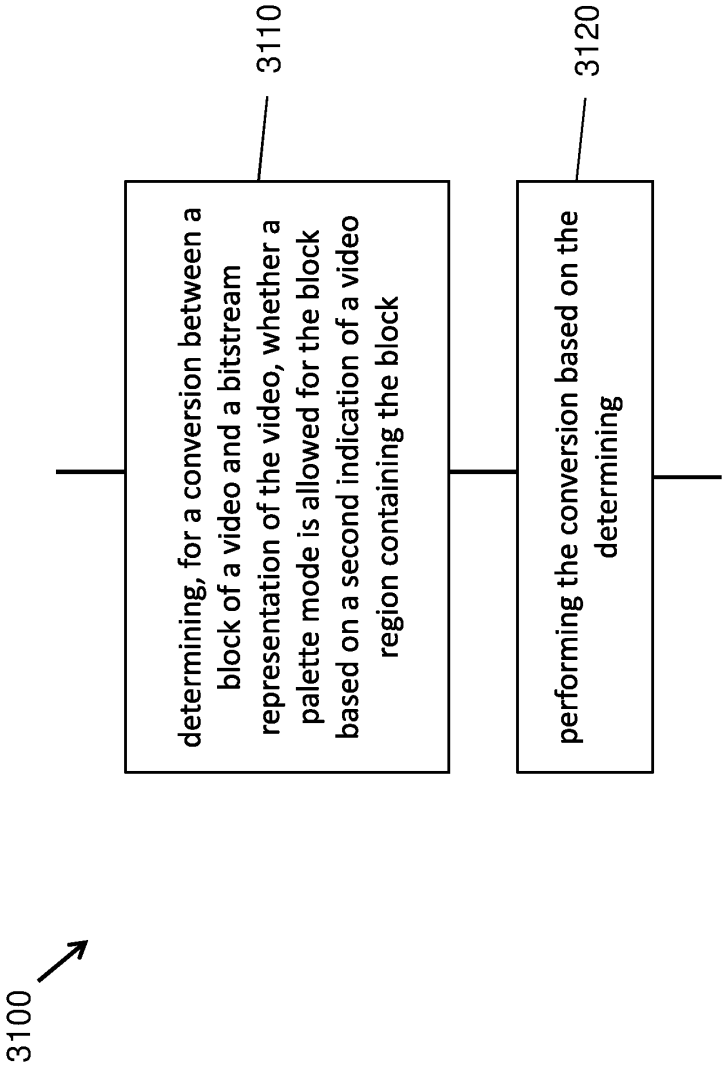
3100
3110
determining, for a conversion between a block of a video and a bitstream representation of the video, whether a palette mode is allowed for the block based on a second indication of a video region containing the block
3120
performing the conversion based on the determining

FIG. 31