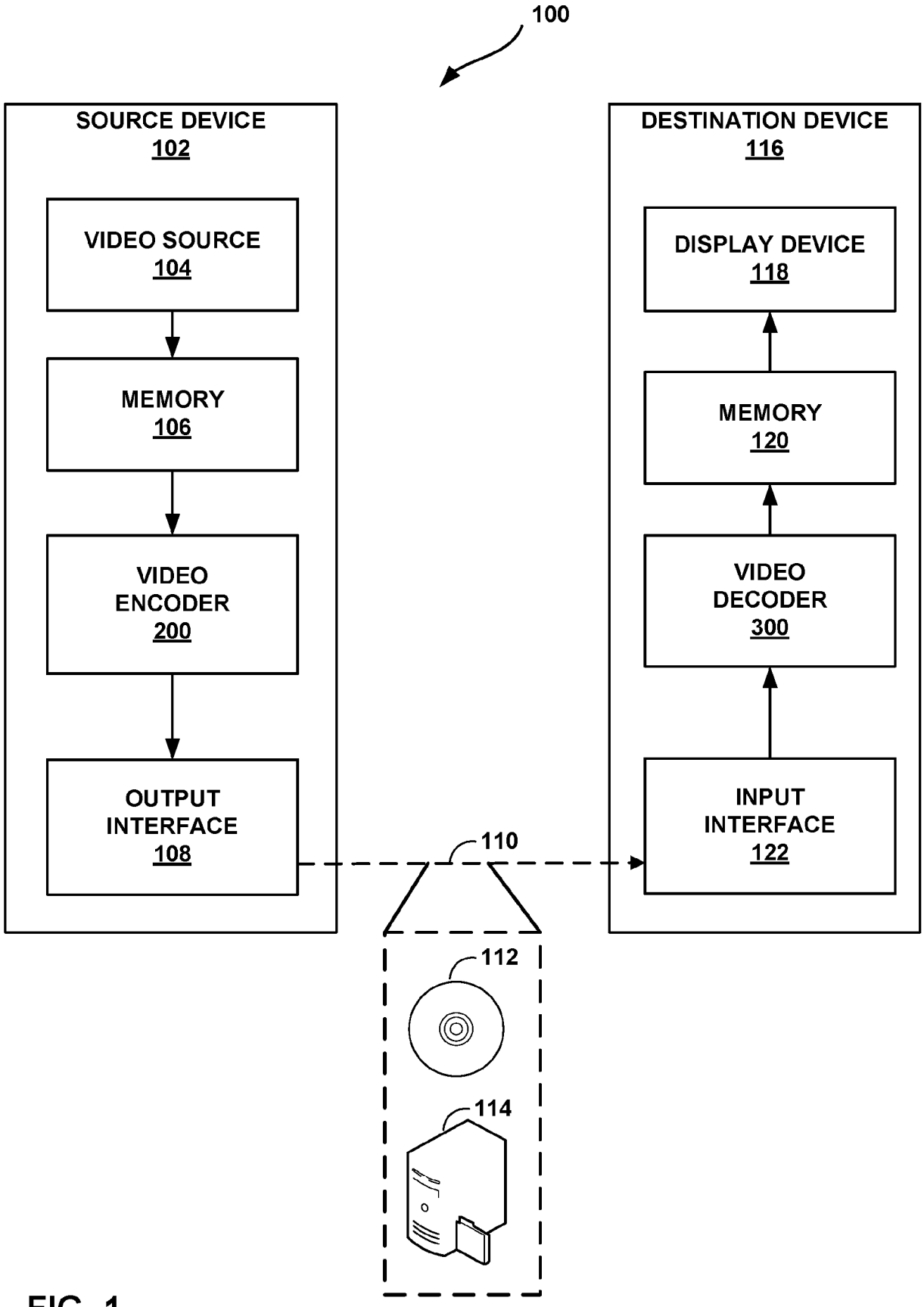

100
SOURCE DEVICE
102
VIDEO SOURCE
104
MEMORY
106
VIDEO
ENCODER
200
OUTPUT
INTERFACE
108
110
DESTINATION DEVICE
116
DISPLAY DEVICE
118
MEMORY
120
VIDEO
DECODER
300
INPUT
INTERFACE
122
112
114

FIG. 1

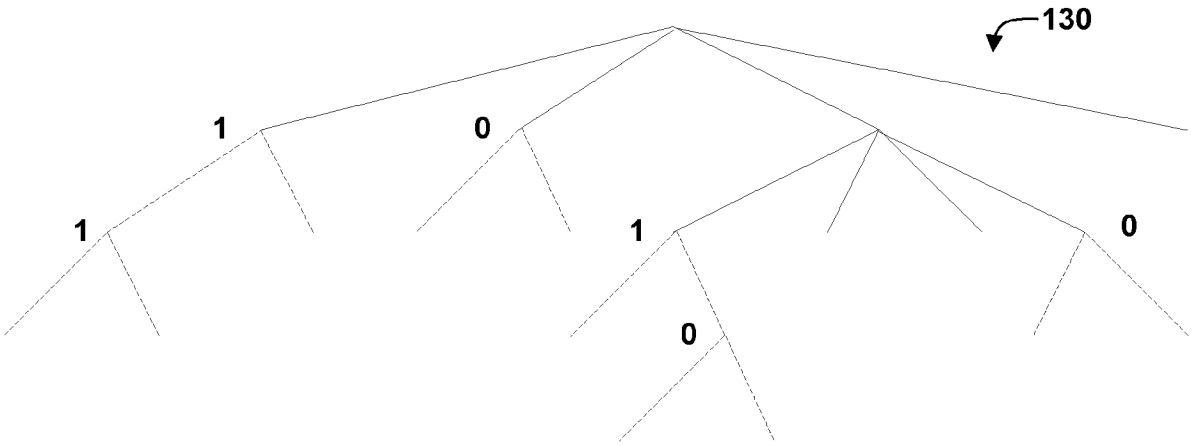


FIG. 2A

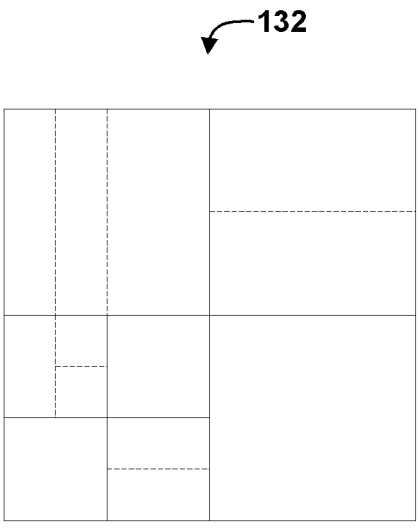


FIG. 2B

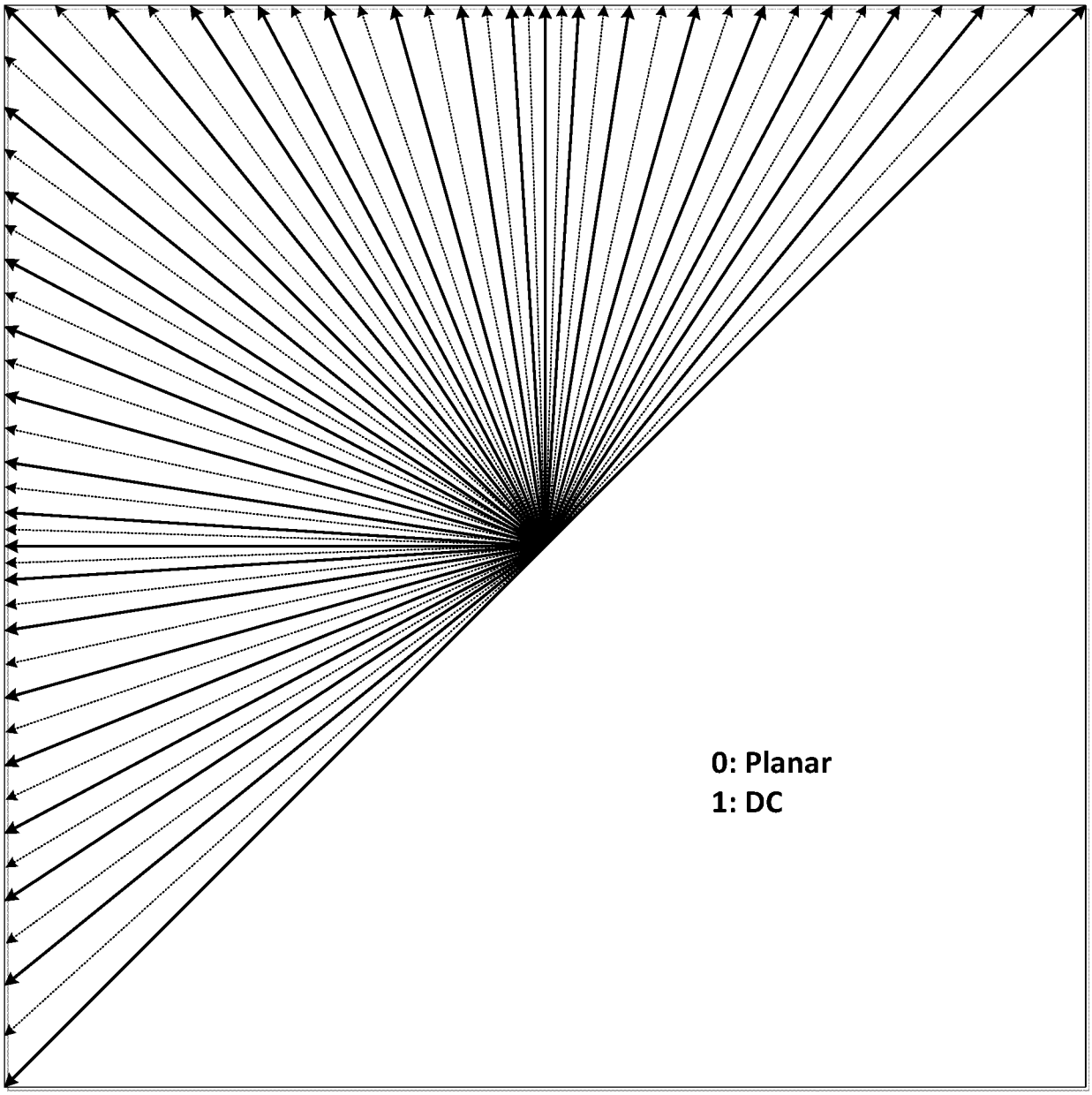


FIG. 3

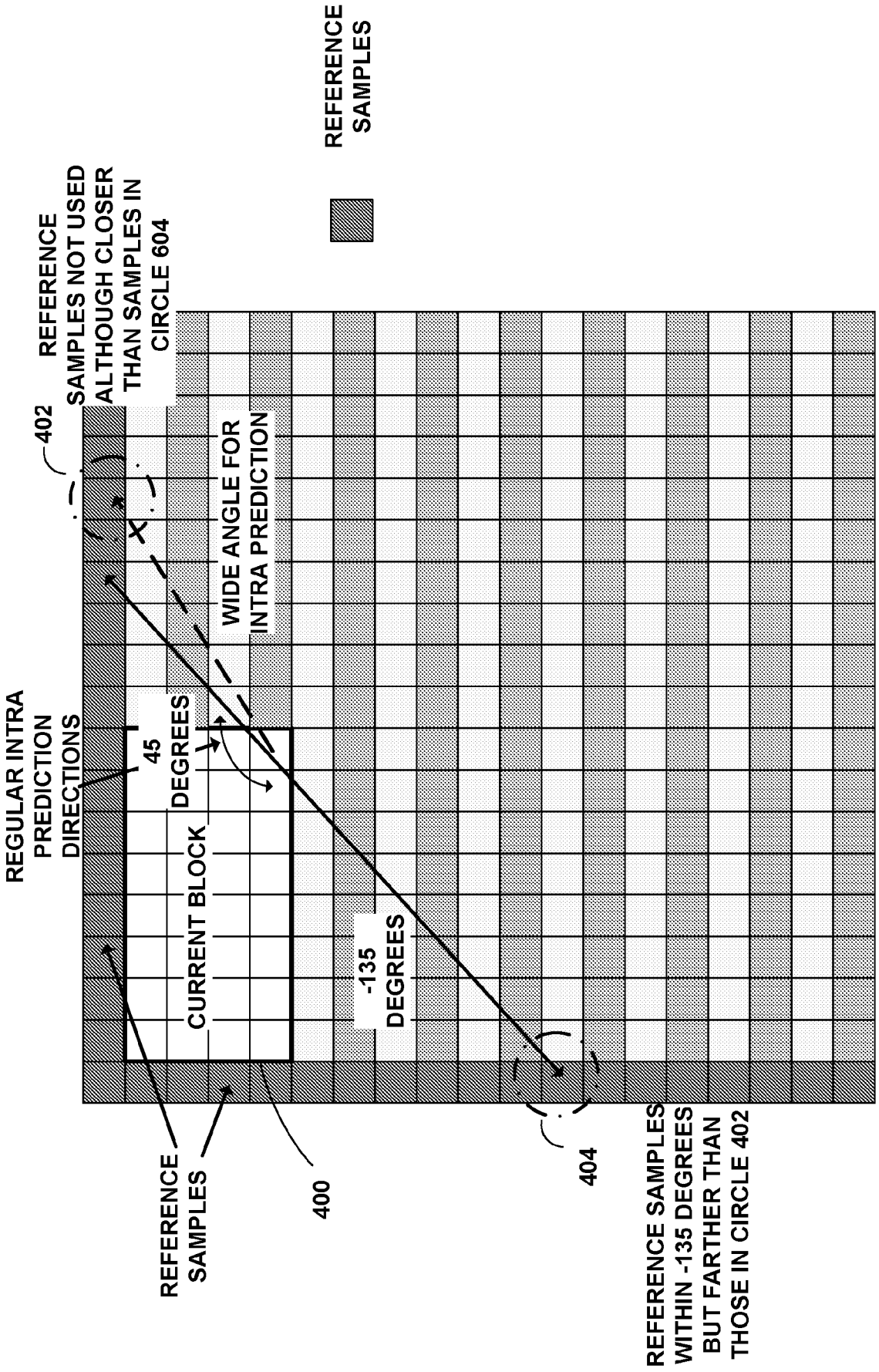

REFERENCE SAMPLES
REFERENCE SAMPLES NOT USED ALTHOUGH CLOSER THAN SAMPLES IN CIRCLE 604
402
WIDE ANGLE FOR INTRA PREDICTION
REGULAR INTRA PREDICTION DIRECTIONS
45 DEGREES
CURRENT BLOCK
-135 DEGREES
REFERENCE SAMPLES
400
404
REFERENCE SAMPLES WITHIN -135 DEGREES BUT FARTHER THAN THOSE IN CIRCLE 402

FIG. 4

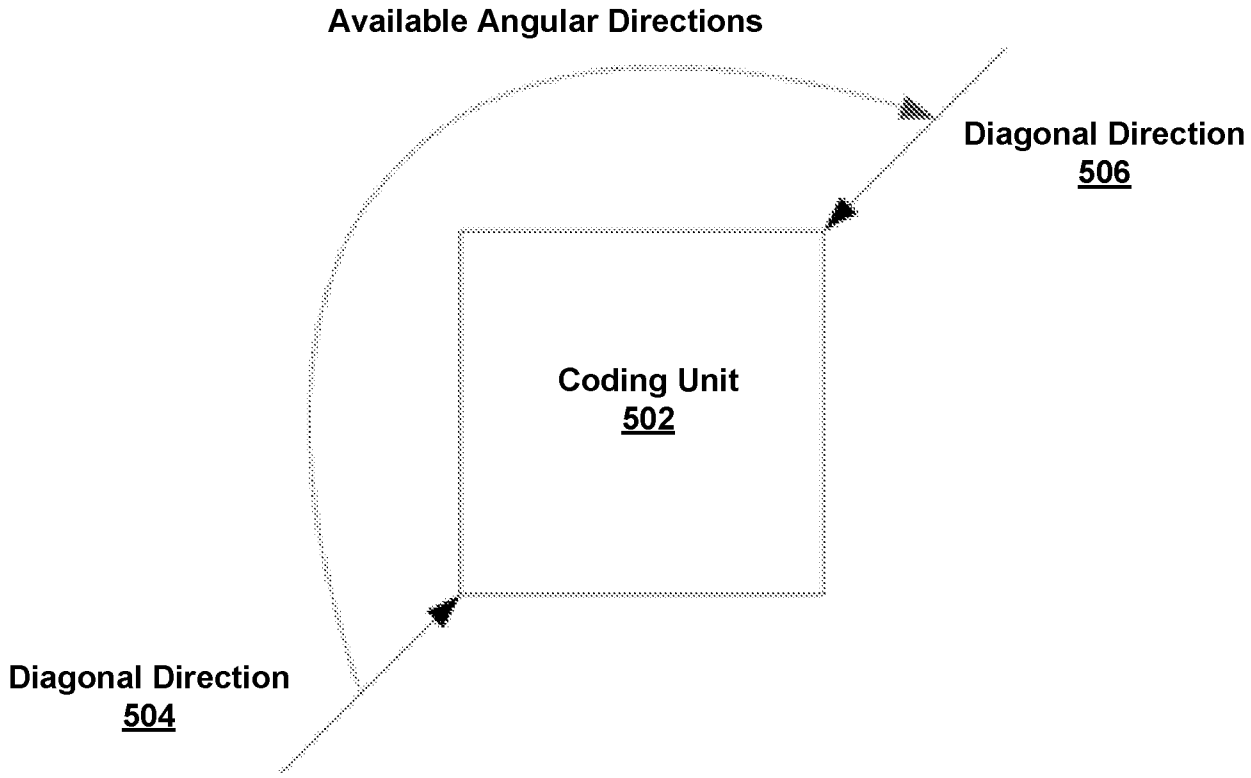

Available Angular Directions
Diagonal Direction
506
Coding Unit
502
Diagonal Direction
504

FIG. 5A

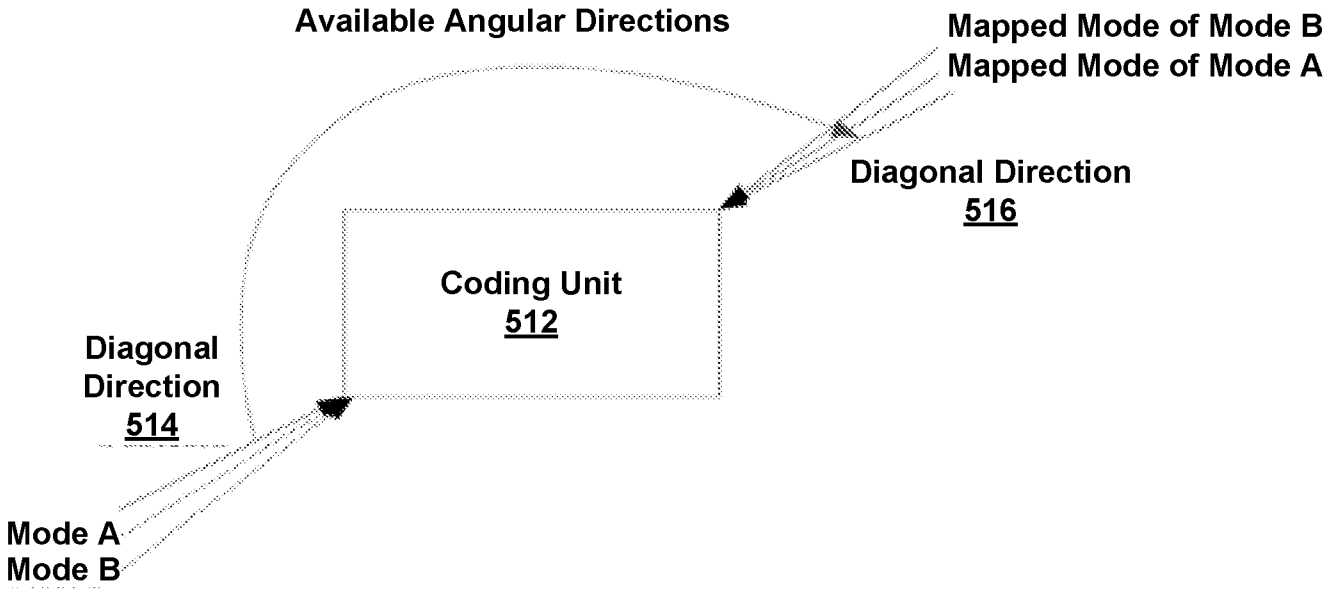

Available Angular Directions
Mapped Mode of Mode B
Mapped Mode of Mode A
Diagonal Direction
516
Coding Unit
512
Diagonal
Direction
514
Mode A
Mode B

FIG. 5B

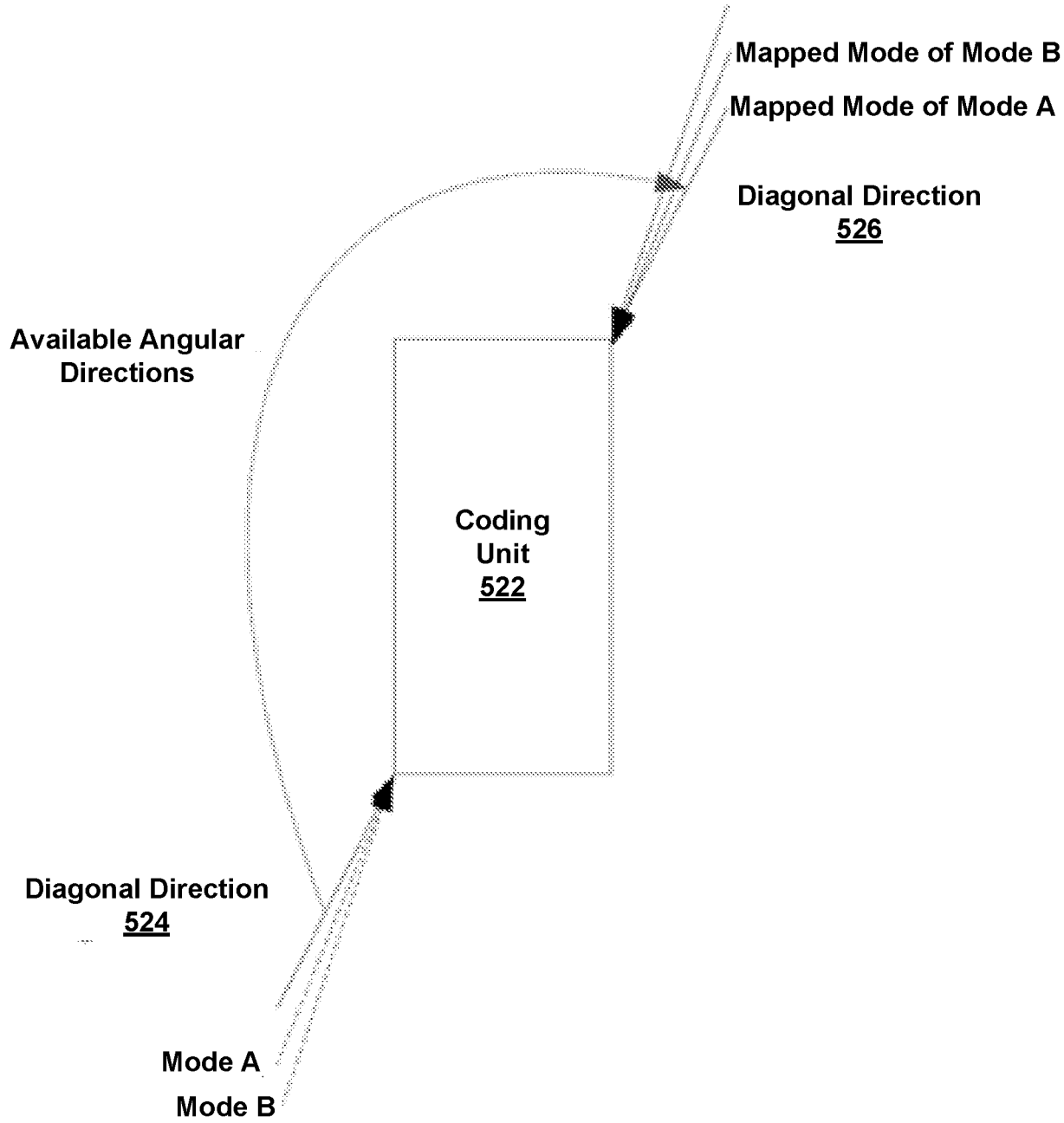

Mapped Mode of Mode B
Mapped Mode of Mode A
Diagonal Direction
526
Available Angular
Directions
Coding
Unit
522
Diagonal Direction
524
Mode A
Mode B

FIG. 5C

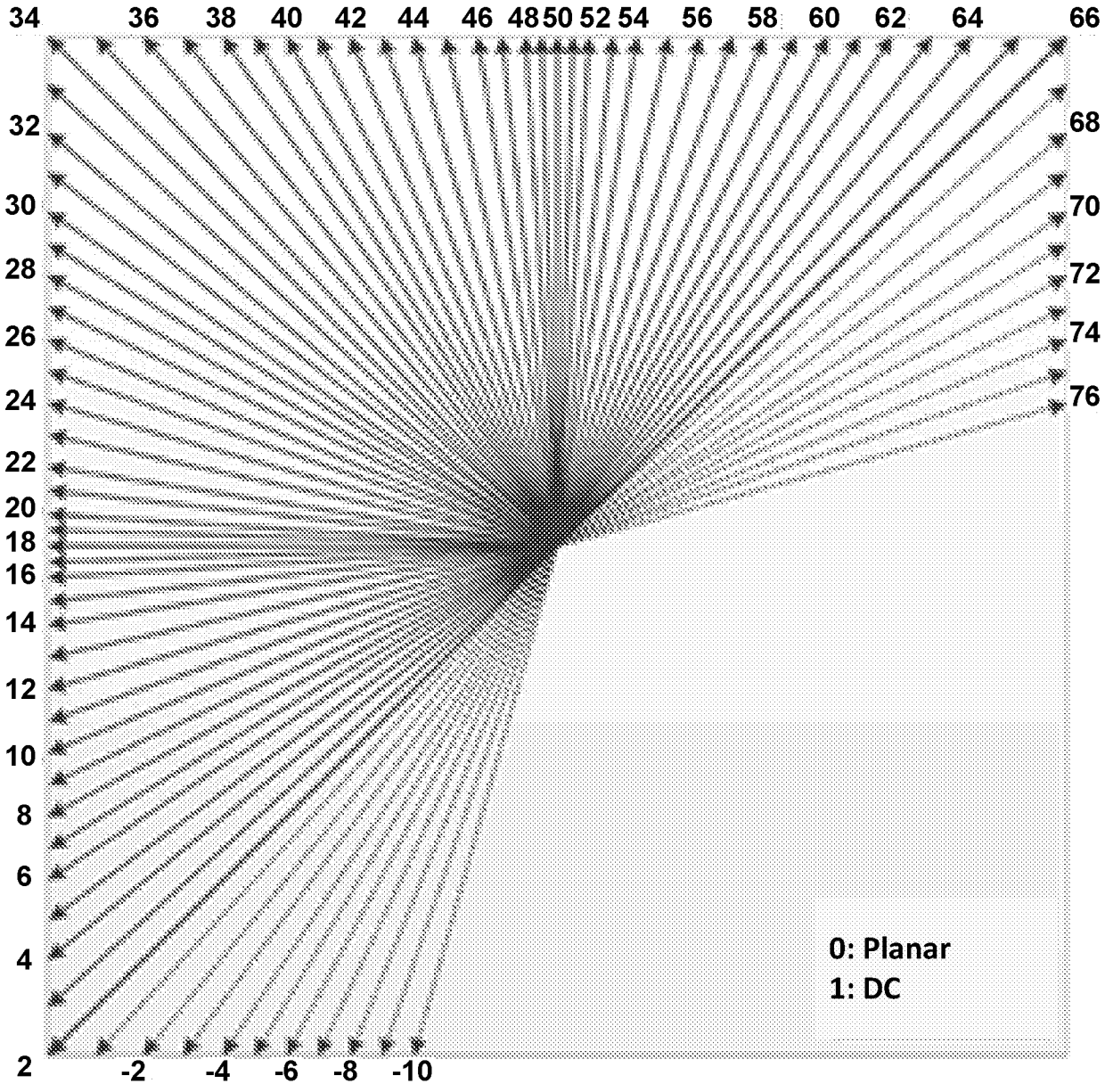

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-2
-4
-6
-8
-10
0: Planar
1: DC

FIG. 6

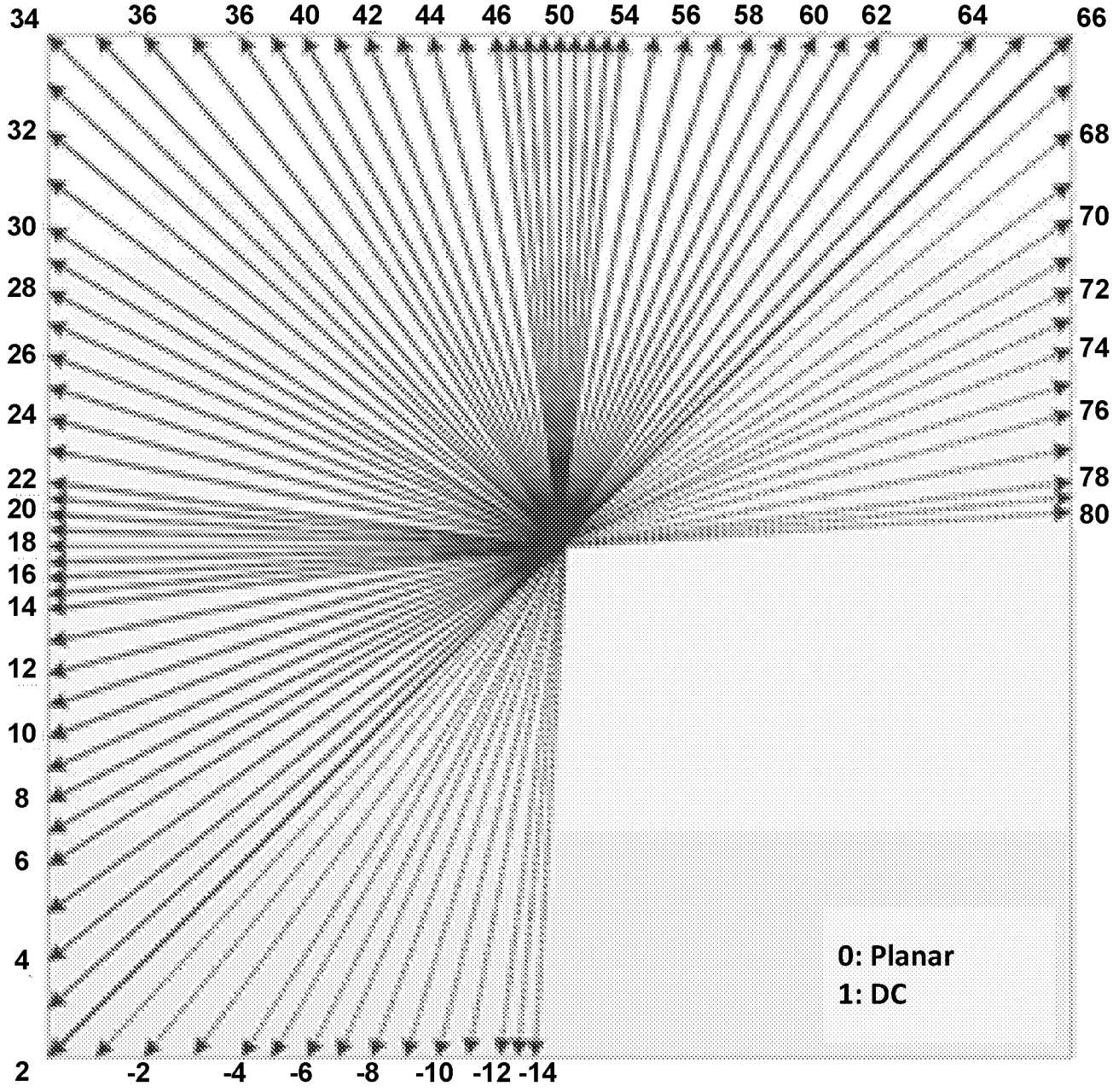

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4
0: Planar
1: DC
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-2
-4
-6
-8
-10
-12
-14

FIG. 7

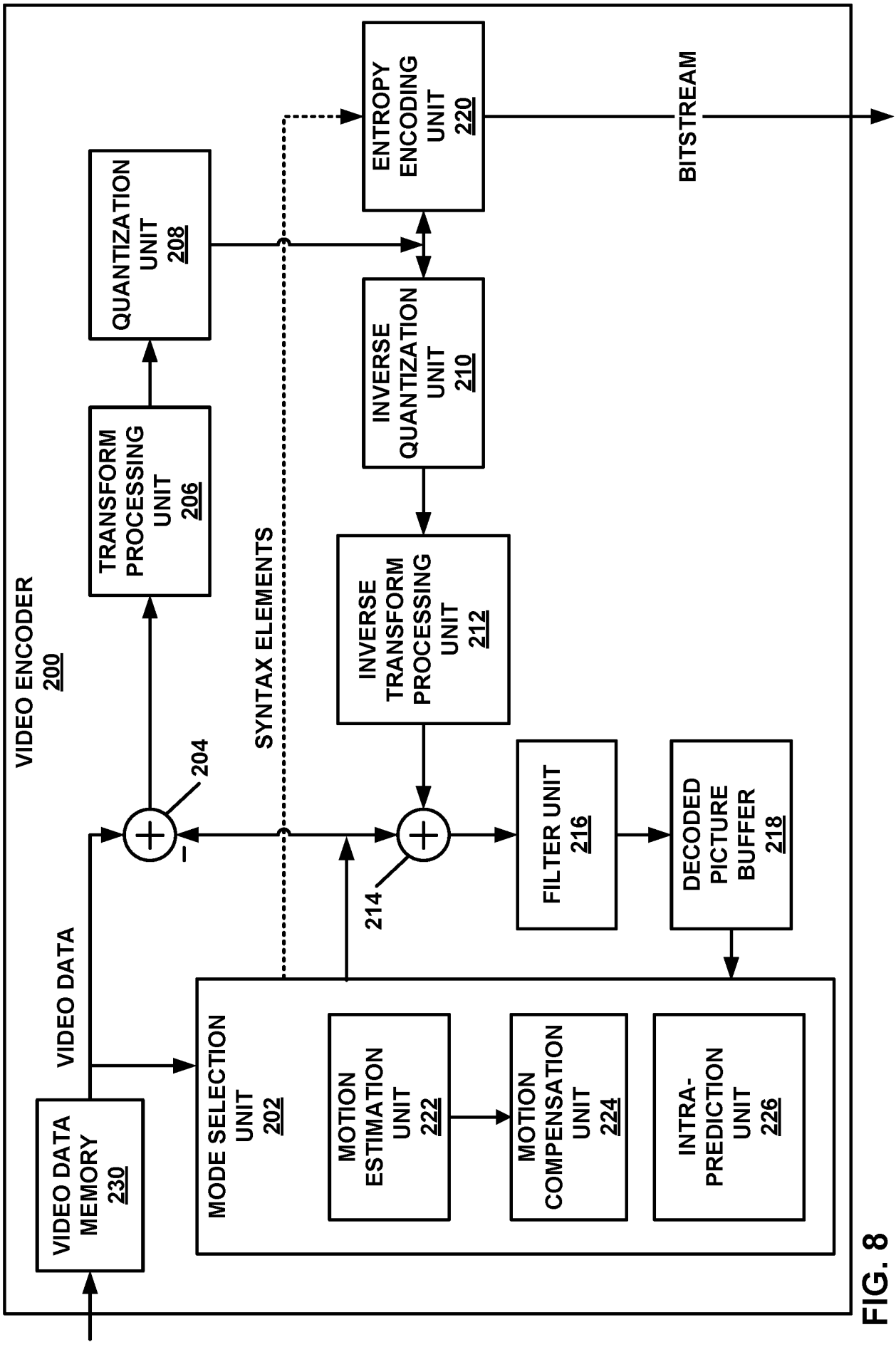

VIDEO ENCODER
200
VIDEO DATA MEMORY
230
VIDEO DATA
MODE SELECTION UNIT
202
MOTION ESTIMATION UNIT
222
MOTION COMPENSATION UNIT
224
INTRA-PREDICTION UNIT
226
204
214
SYNTAX ELEMENTS
TRANSFORM PROCESSING UNIT
206
QUANTIZATION UNIT
208
INVERSE QUANTIZATION UNIT
210
INVERSE TRANSFORM PROCESSING UNIT
212
FILTER UNIT
216
DECODED PICTURE BUFFER
218
ENTROPY ENCODING UNIT
220
BITSTREAM

FIG. 8

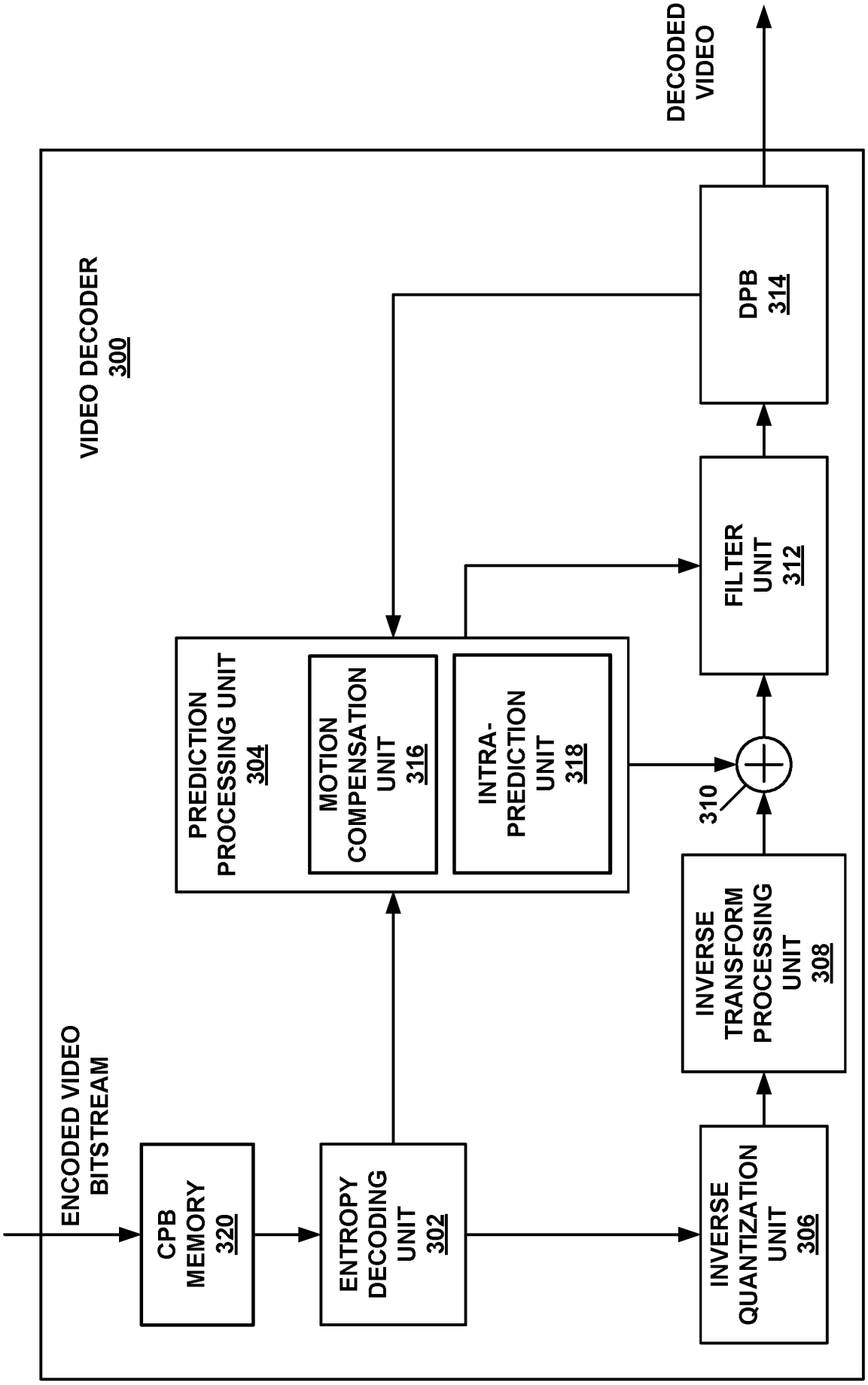

DECODED VIDEO
VIDEO DECODER 300
DPB 314
FILTER UNIT 312
PREDICTION PROCESSING UNIT 304
MOTION COMPENSATION UNIT 316
INTRA-PREDICTION UNIT 318
310
INVERSE TRANSFORM PROCESSING UNIT 308
INVERSE QUANTIZATION UNIT 306
ENTROPY DECODING UNIT 302
CPB MEMORY 320
ENCODED VIDEO BITSTREAM

FIG.9

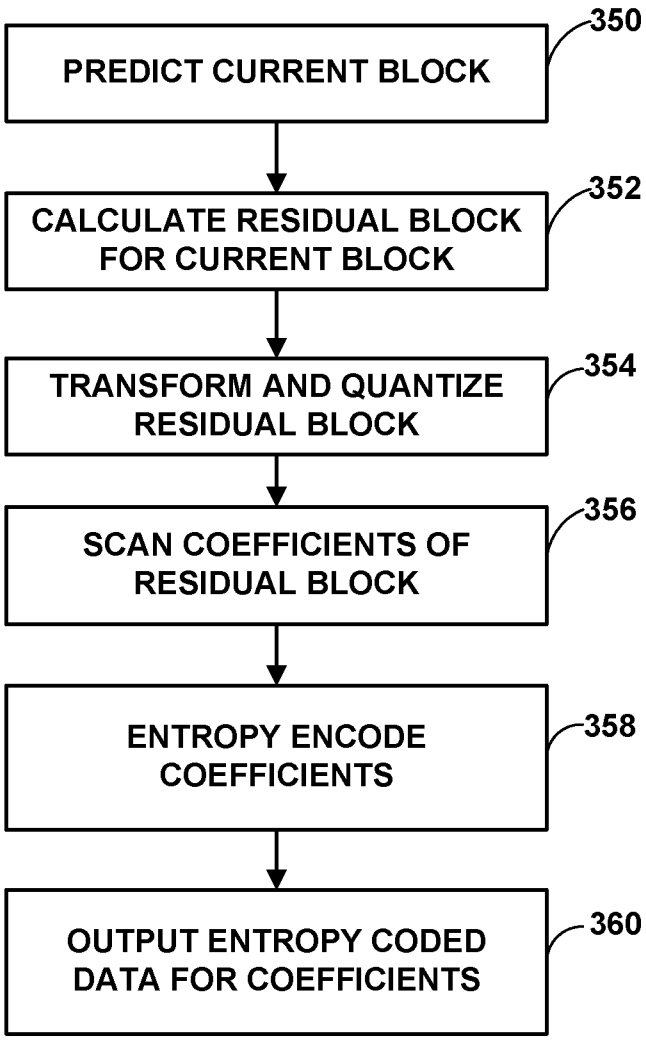

PREDICT CURRENT BLOCK
350
CALCULATE RESIDUAL BLOCK FOR CURRENT BLOCK
352
TRANSFORM AND QUANTIZE RESIDUAL BLOCK
354
SCAN COEFFICIENTS OF RESIDUAL BLOCK
356
ENTROPY ENCODE COEFFICIENTS
358
OUTPUT ENTROPY CODED DATA FOR COEFFICIENTS
360

FIG. 10

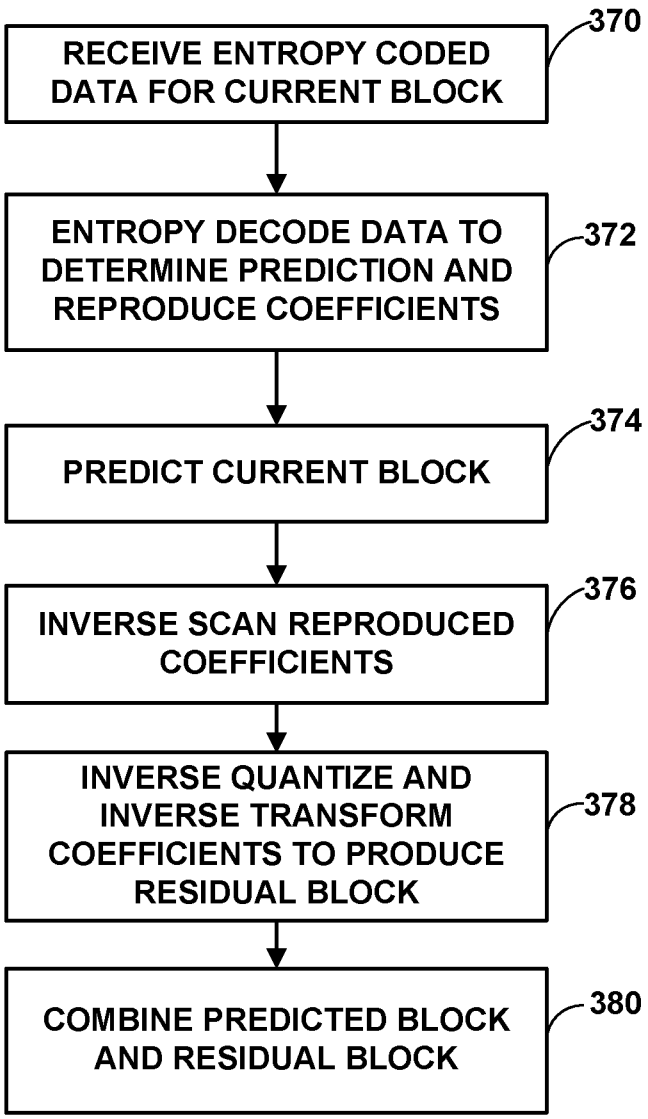

RECEIVE ENTROPY CODED DATA FOR CURRENT BLOCK
370
ENTROPY DECODE DATA TO DETERMINE PREDICTION AND REPRODUCE COEFFICIENTS
372
PREDICT CURRENT BLOCK
374
INVERSE SCAN REPRODUCED COEFFICIENTS
376
INVERSE QUANTIZE AND INVERSE TRANSFORM COEFFICIENTS TO PRODUCE RESIDUAL BLOCK
378
COMBINE PREDICTED BLOCK AND RESIDUAL BLOCK
380

FIG. 11

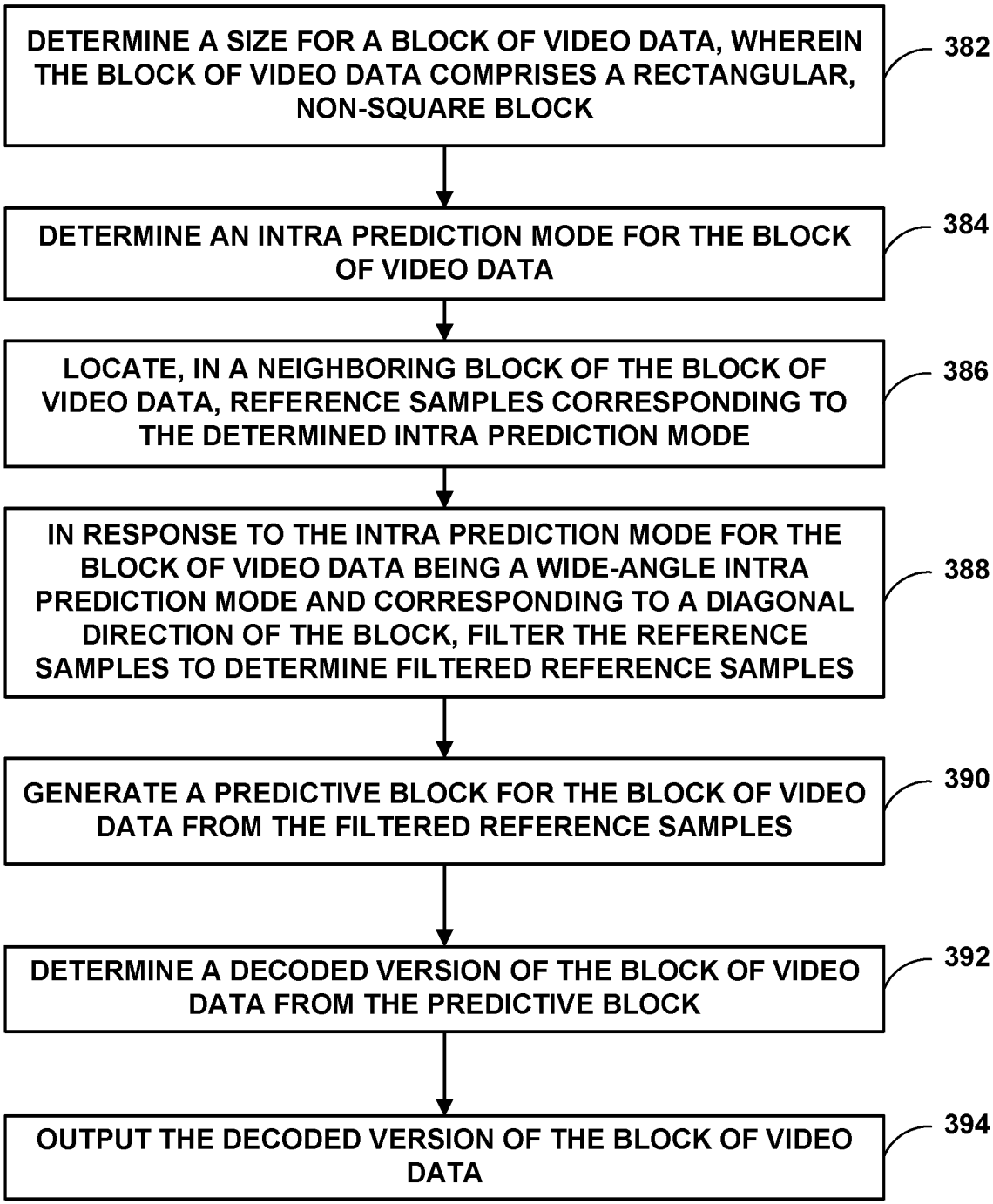

DETERMINE A SIZE FOR A BLOCK OF VIDEO DATA, WHEREIN THE BLOCK OF VIDEO DATA COMPRISES A RECTANGULAR, NON-SQUARE BLOCK
382
DETERMINE AN INTRA PREDICTION MODE FOR THE BLOCK OF VIDEO DATA
384
LOCATE, IN A NEIGHBORING BLOCK OF THE BLOCK OF VIDEO DATA, REFERENCE SAMPLES CORRESPONDING TO THE DETERMINED INTRA PREDICTION MODE
386
IN RESPONSE TO THE INTRA PREDICTION MODE FOR THE BLOCK OF VIDEO DATA BEING A WIDE-ANGLE INTRA PREDICTION MODE AND CORRESPONDING TO A DIAGONAL DIRECTION OF THE BLOCK, FILTER THE REFERENCE SAMPLES TO DETERMINE FILTERED REFERENCE SAMPLES
388
GENERATE A PREDICTIVE BLOCK FOR THE BLOCK OF VIDEO DATA FROM THE FILTERED REFERENCE SAMPLES
390
DETERMINE A DECODED VERSION OF THE BLOCK OF VIDEO DATA FROM THE PREDICTIVE BLOCK
392
OUTPUT THE DECODED VERSION OF THE BLOCK OF VIDEO DATA
394

FIG. 12