FIG. 1

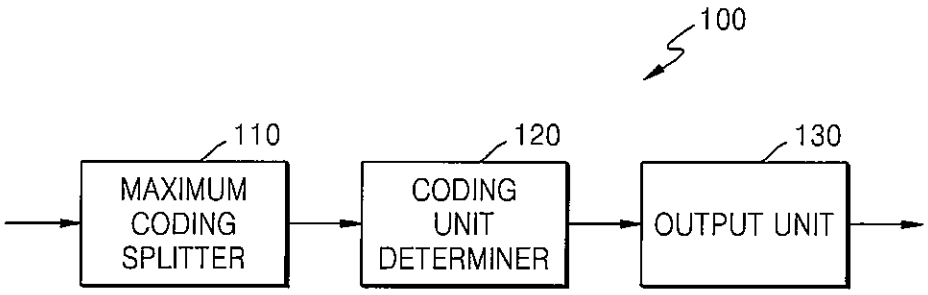

100
110
MAXIMUM CODING SPLITTER
120
CODING UNIT DETERMINER
130
OUTPUT UNIT

FIG. 2

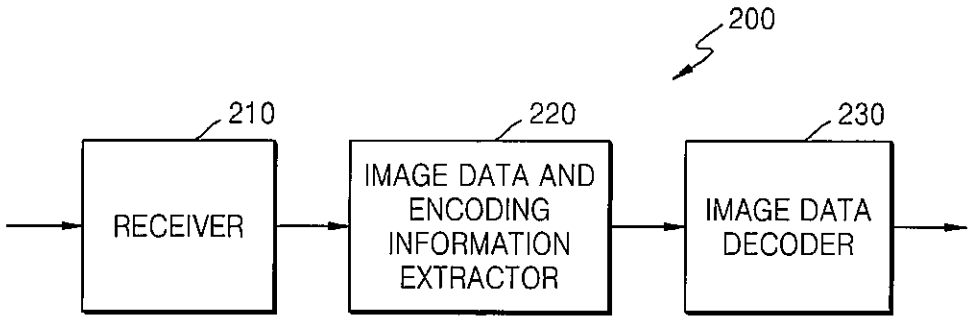

200
210
RECEIVER
220
IMAGE DATA AND ENCODING INFORMATION EXTRACTOR
230
IMAGE DATA DECODER

FIG. 3

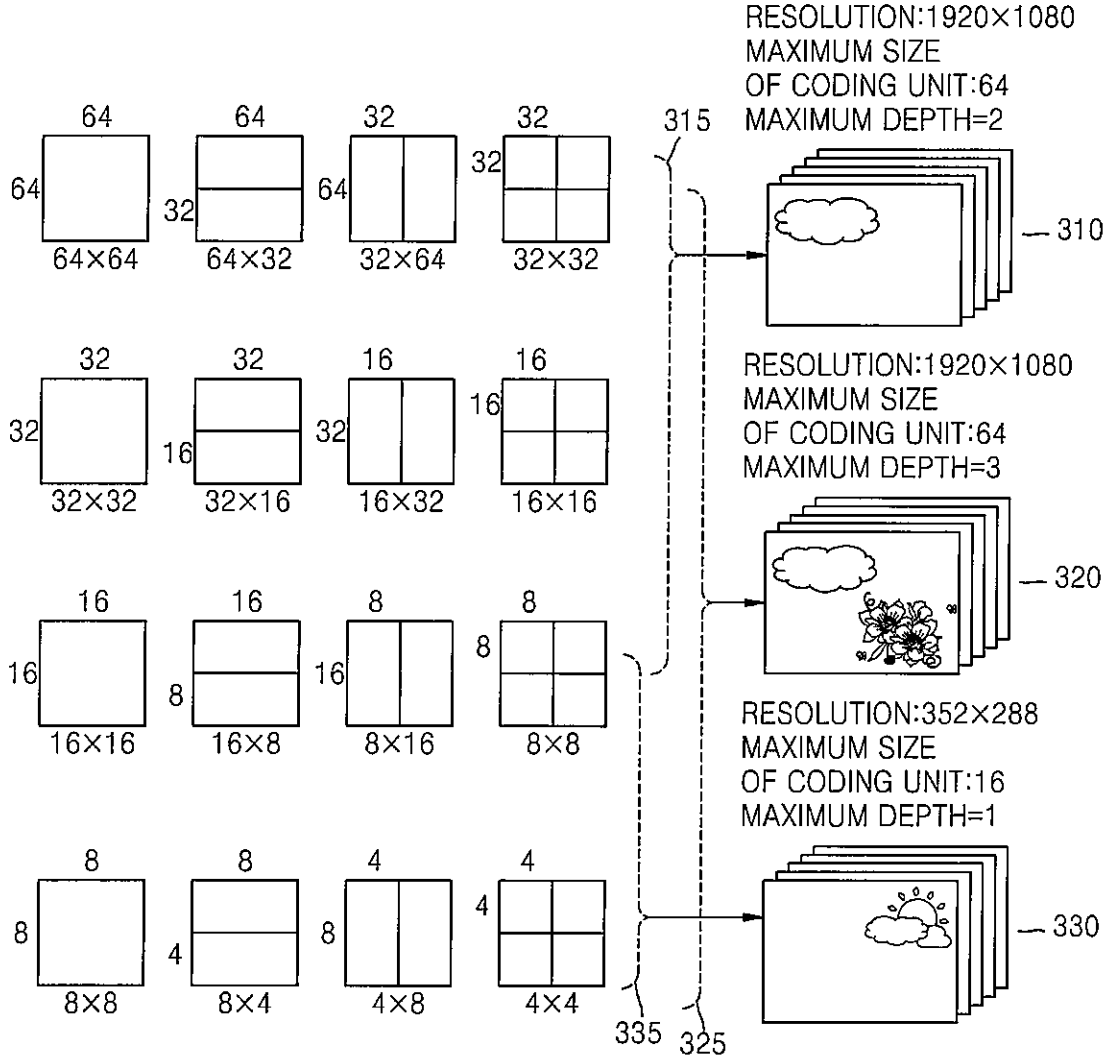

RESOLUTION:1920×1080
MAXIMUM SIZE
OF CODING UNIT:64
MAXIMUM DEPTH=2
315
64×64
64×32
32×64
32×32
310
RESOLUTION:1920×1080
MAXIMUM SIZE
OF CODING UNIT:64
MAXIMUM DEPTH=3
32×32
32×16
16×32
16×16
320
RESOLUTION:352×288
MAXIMUM SIZE
OF CODING UNIT:16
MAXIMUM DEPTH=1
16×16
16×8
8×16
8×8
330
8×8
8×4
4×8
4×4
335
325

FIG. 4

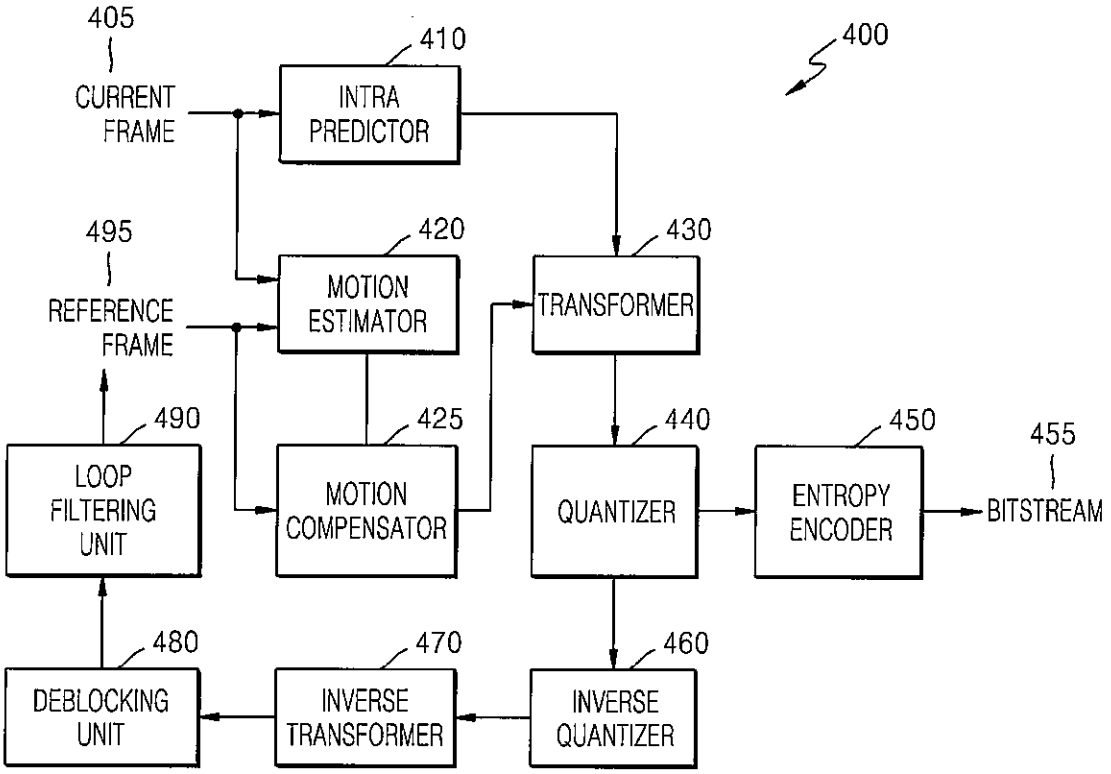

405
CURRENT FRAME
410
INTRA PREDICTOR
400
495
REFERENCE FRAME
420
MOTION ESTIMATOR
430
TRANSFORMER
490
LOOP FILTERING UNIT
425
MOTION COMPENSATOR
440
QUANTIZER
450
ENTROPY ENCODER
455
BITSTREAM
480
DEBLOCKING UNIT
470
INVERSE TRANSFORMER
460
INVERSE QUANTIZER

FIG. 5

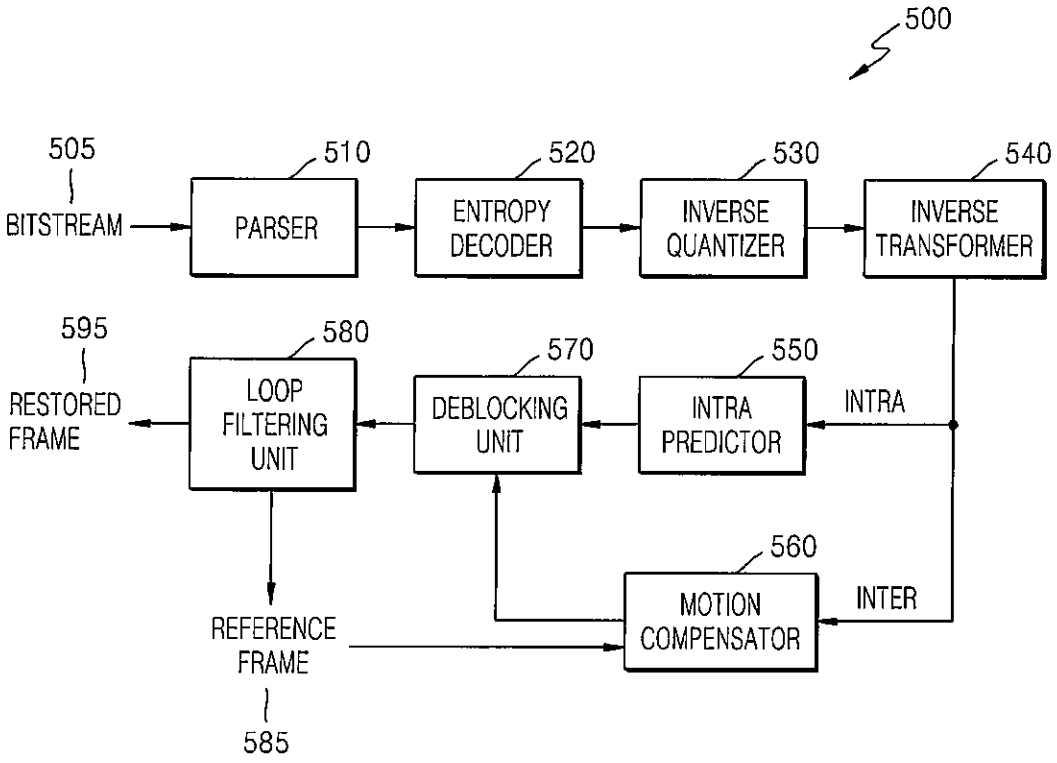

500
505
BITSTREAM
510
PARSER
520
ENTROPY DECODER
530
INVERSE QUANTIZER
540
INVERSE TRANSFORMER
595
RESTORED FRAME
580
LOOP FILTERING UNIT
570
DEBLOCKING UNIT
550
INTRA PREDICTOR
INTRA
560
MOTION COMPENSATOR
INTER
REFERENCE FRAME
585

FIG. 6

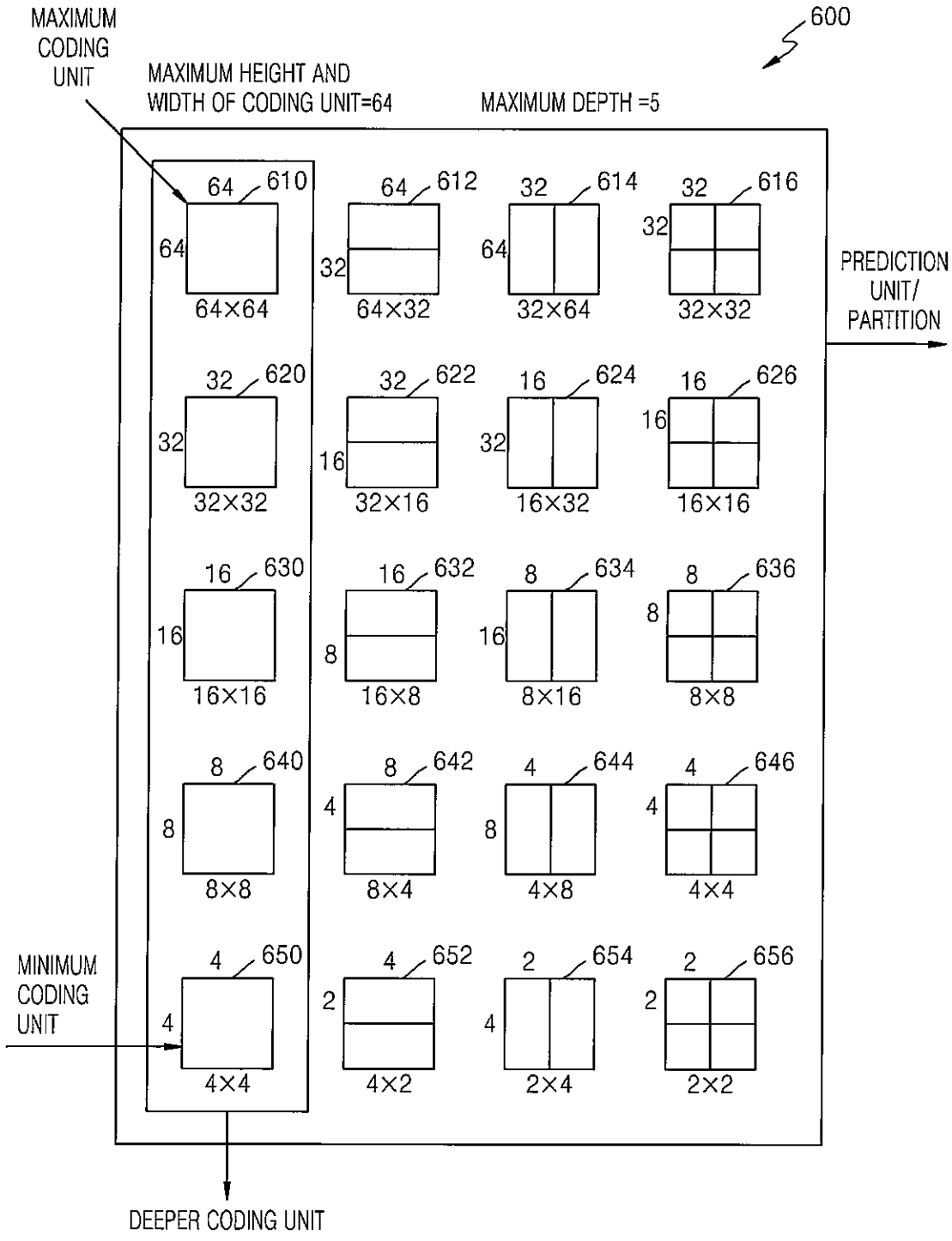

600
MAXIMUM CODING UNIT
MAXIMUM HEIGHT AND WIDTH OF CODING UNIT=64
MAXIMUM DEPTH =5
PREDICTION UNIT/ PARTITION
64 610
64 64×64
64 612
32 64×32
32 614
64 32×64
32 616
32 32×32
32 620
32 32×32
32 622
16 32×16
16 624
32 16×32
16 626
16 16×16
16 630
16 16×16
16 632
8 16×8
8 634
16 8×16
8 636
8 8×8
8 640
8 8×8
8 642
4 8×4
4 644
8 4×8
4 646
4 4×4
MINIMUM CODING UNIT
4 650
4 4×4
4 652
2 4×2
2 654
4 2×4
2 656
2 2×2
DEEPER CODING UNIT

FIG. 7

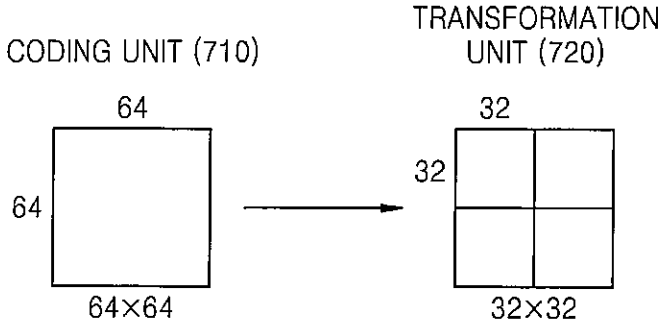

CODING UNIT (710)
TRANSFORMATION UNIT (720)
64
64
64×64
32
32
32×32

FIG. 8

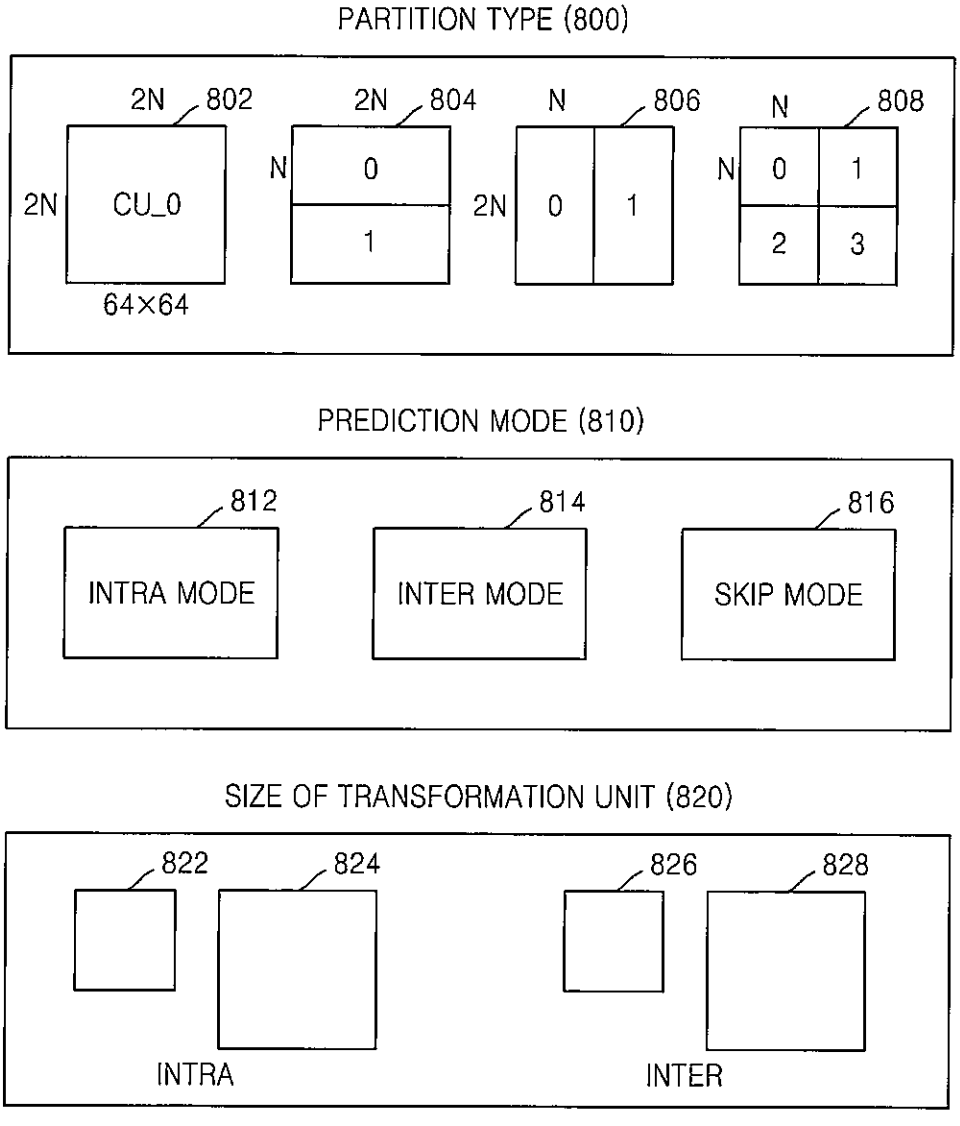

PARTITION TYPE (800)
2N
802
2N
CU_0
64×64
2N
804
N
0
1
N
806
2N
0
1
N
808
N
0
1
2
3
PREDICTION MODE (810)
812
INTRA MODE
814
INTER MODE
816
SKIP MODE
SIZE OF TRANSFORMATION UNIT (820)
822
824
826
828
INTRA
INTER

FIG. 9

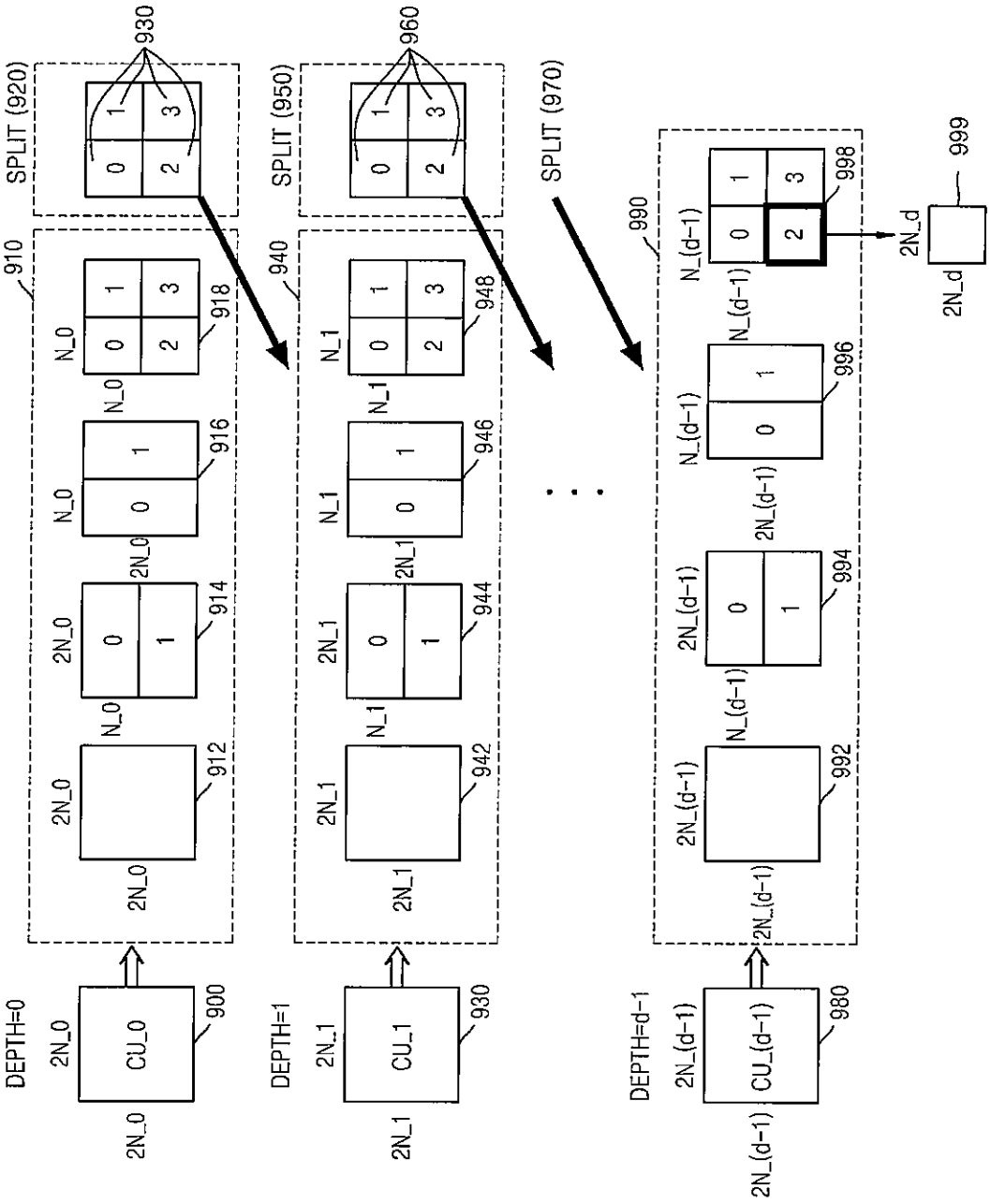
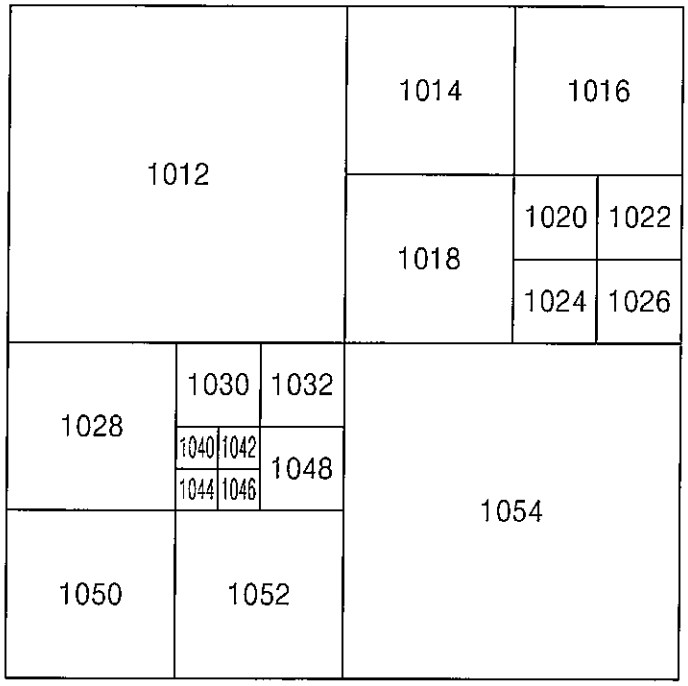

DEPTH=0
DEPTH=1
DEPTH=d-1
SPLIT (920)
SPLIT (950)
SPLIT (970)
CU_0
CU_1
CU_(d-1)
900
910
912
914
916
918
930
940
942
944
946
948
960
980
990
992
994
996
998
999
2N_0
N_0
2N_1
N_1
2N_(d-1)
N_(d-1)
2N_d

FIG. 10



CODING UNIT (1010)

FIG. 11

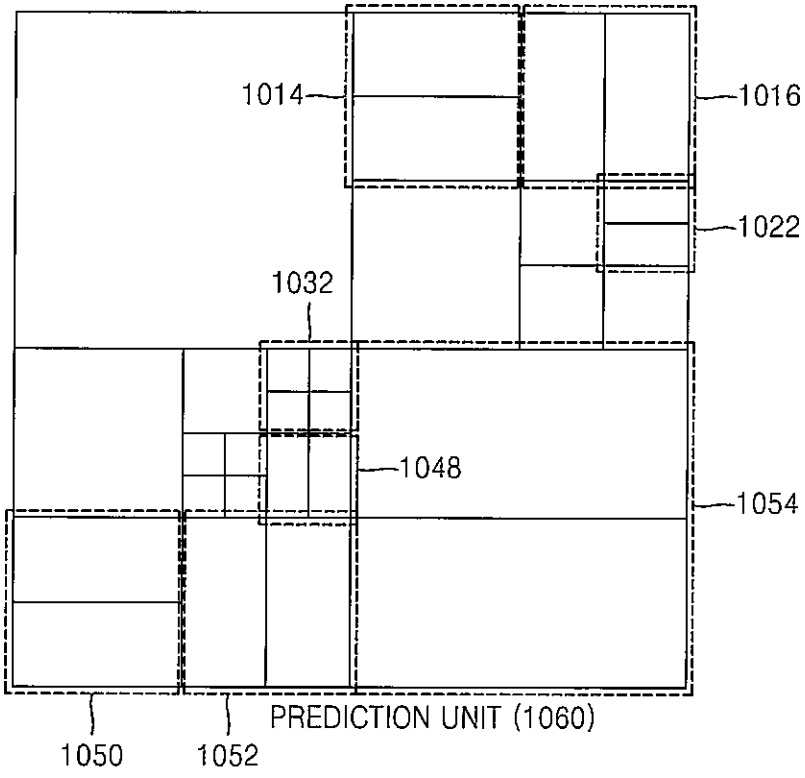


FIG. 12

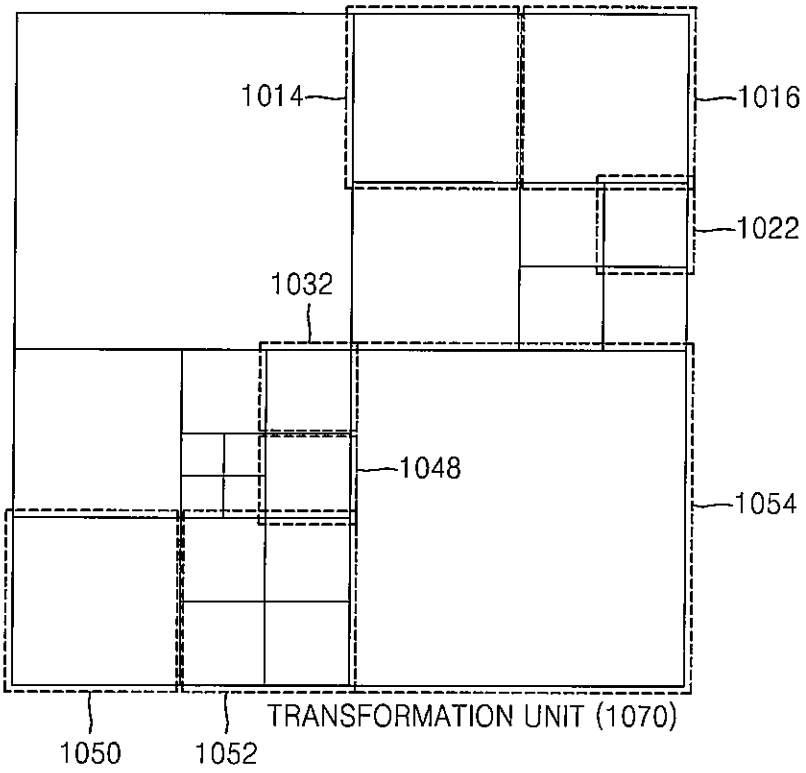

1014
1016
1022
1032
1048
1054
TRANSFORMATION UNIT (1070)
1050
1052

FIG. 13

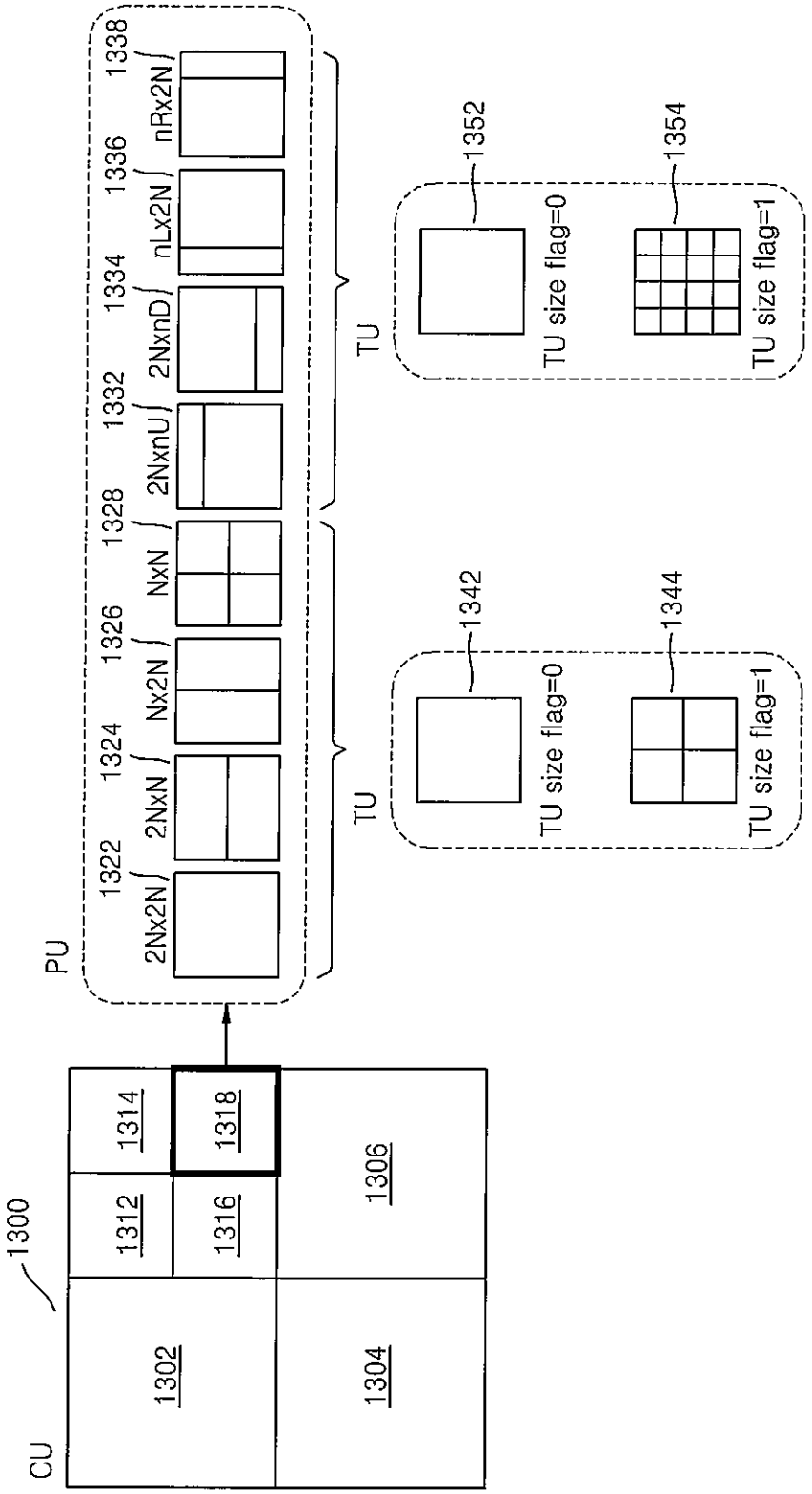

CU
1300
1302
1304
1306
1312
1314
1316
1318
PU
2Nx2N
1322
2NxN
1324
Nx2N
1326
NxN
1328
2NxnU
1332
2NxnD
1334
nLx2N
1336
nRx2N
1338
TU
TU
1342
TU size flag=0
1344
TU size flag=1
1352
TU size flag=0
1354
TU size flag=1

FIG. 14

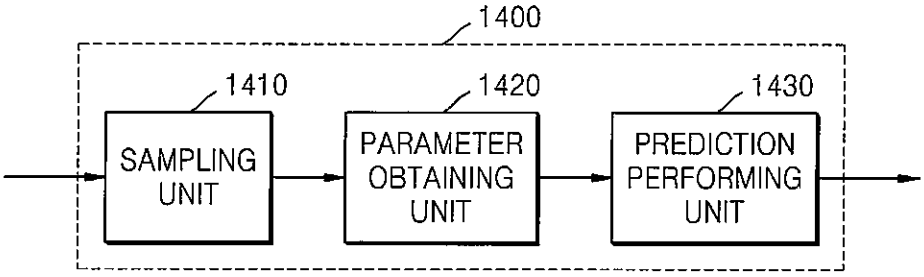


FIG. 15A

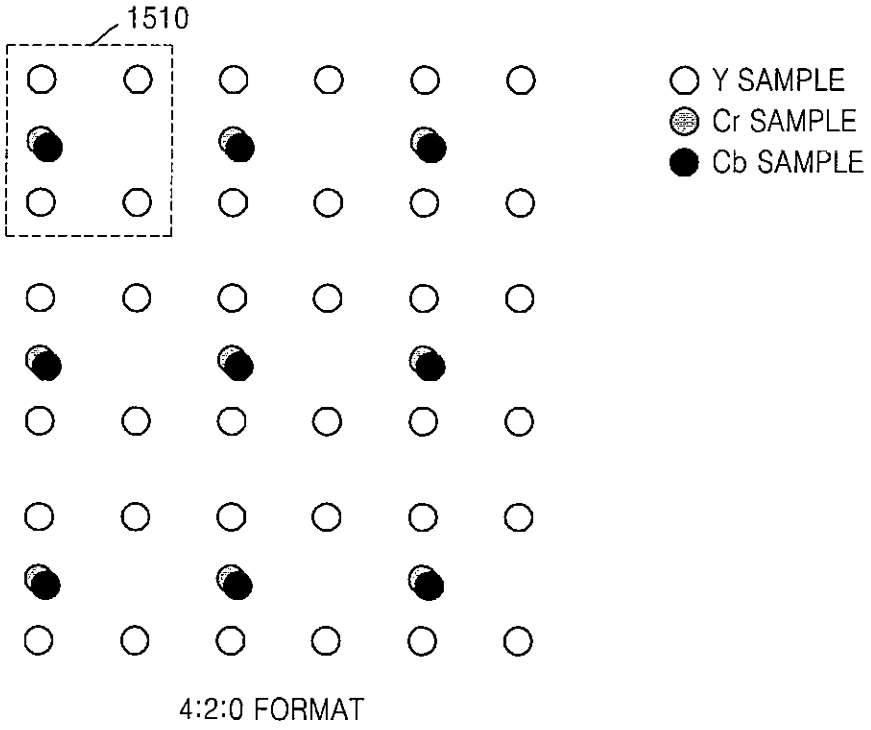
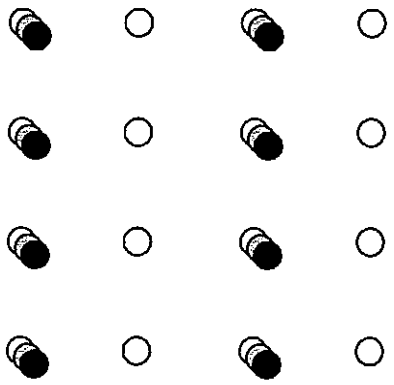
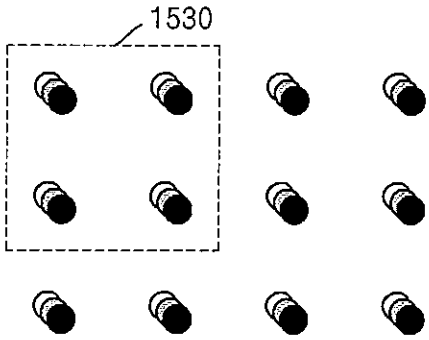


FIG. 15B



4:4:2 FORMAT

FIG. 15C



4:4:4 FORMAT

FIG. 16A

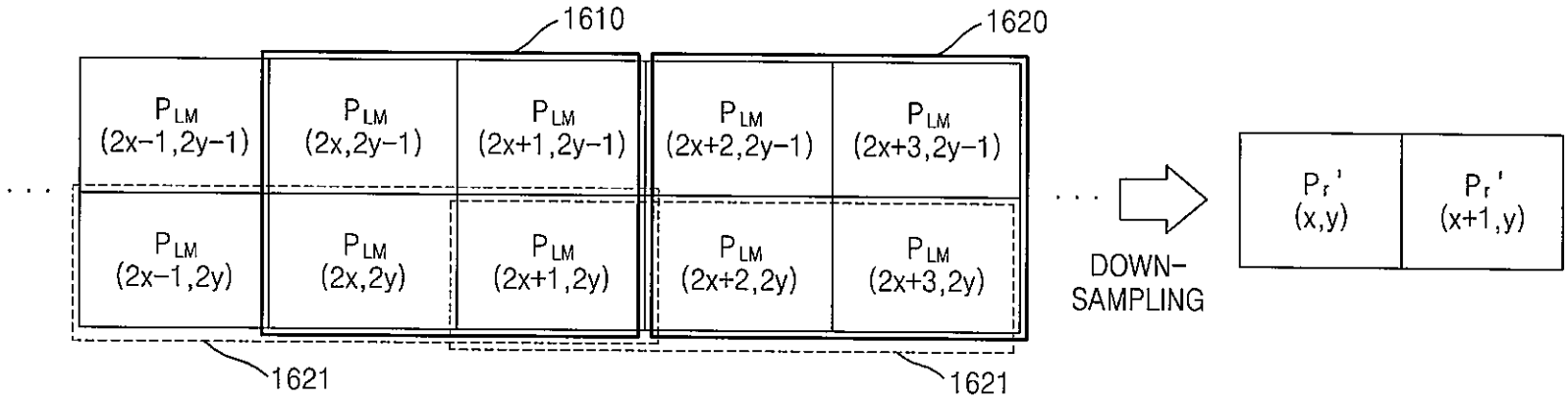


FIG. 16B

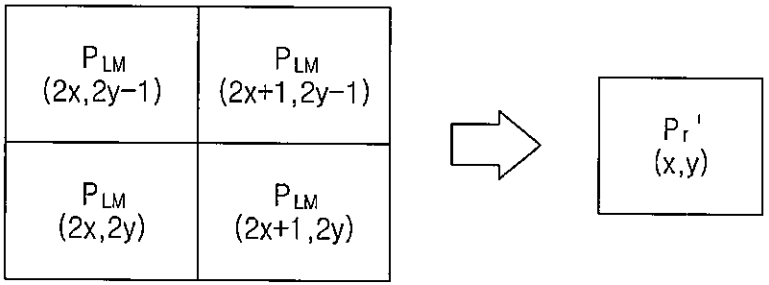


FIG. 17A

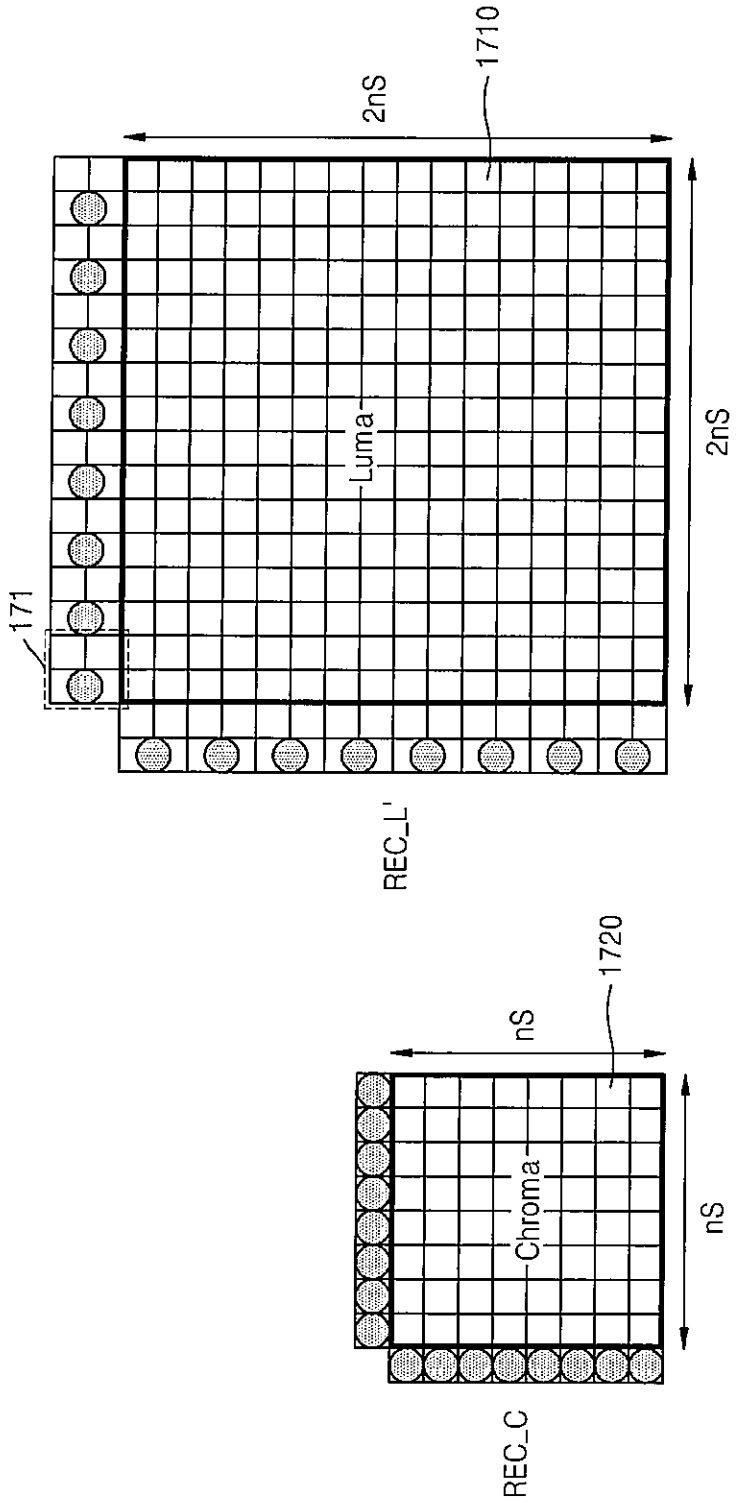


FIG. 17B

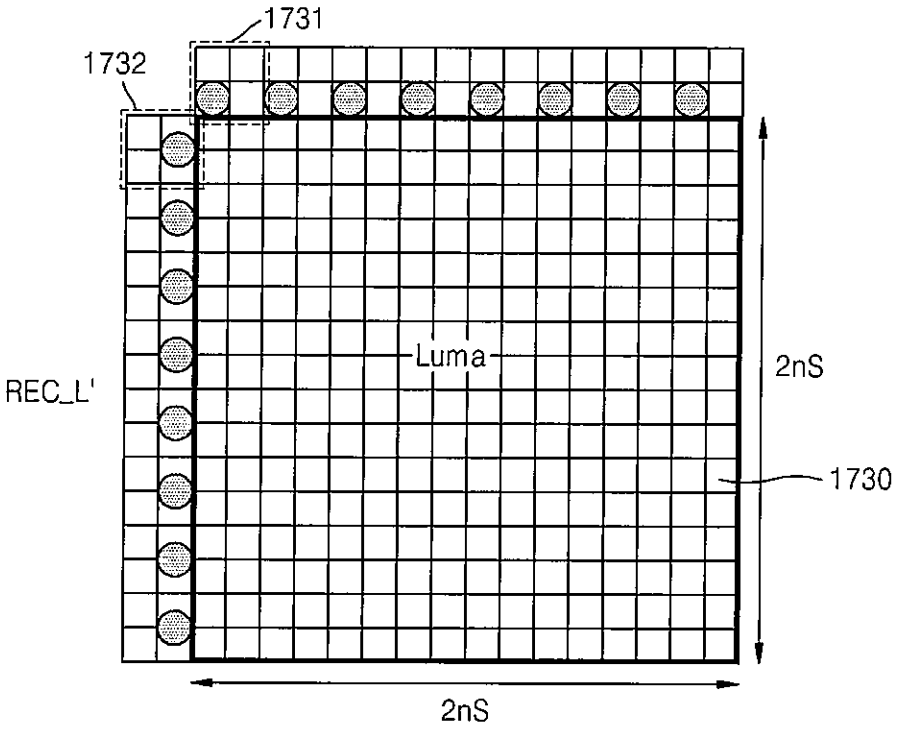


FIG. 17C

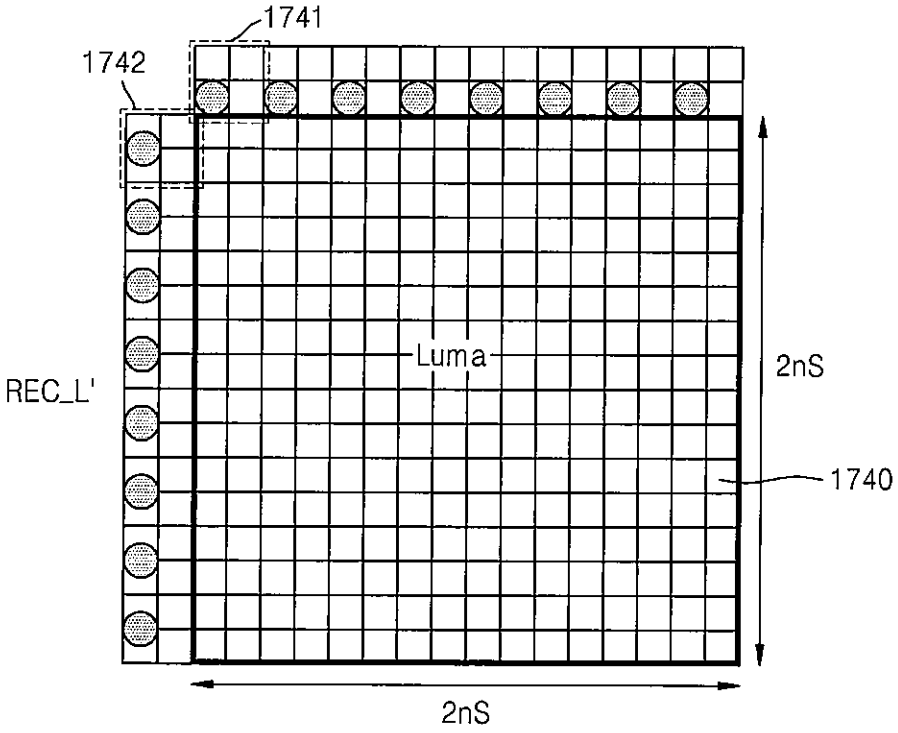


FIG. 18A

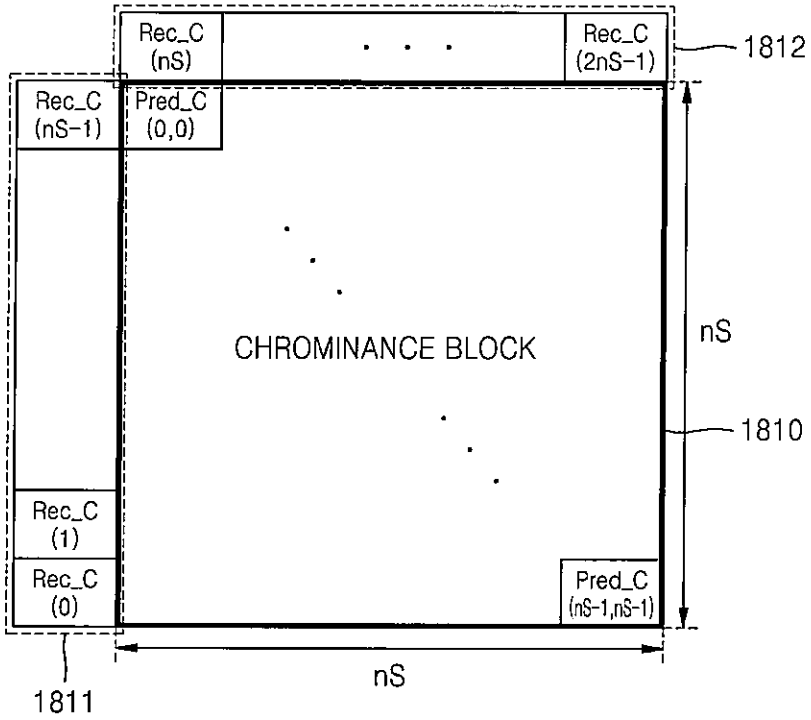


FIG. 18B

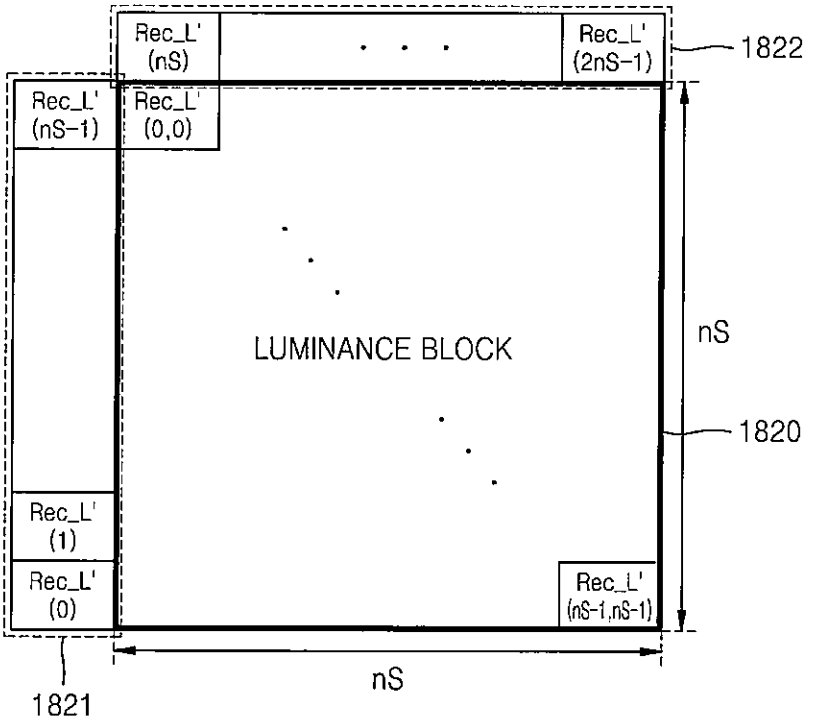


FIG. 19

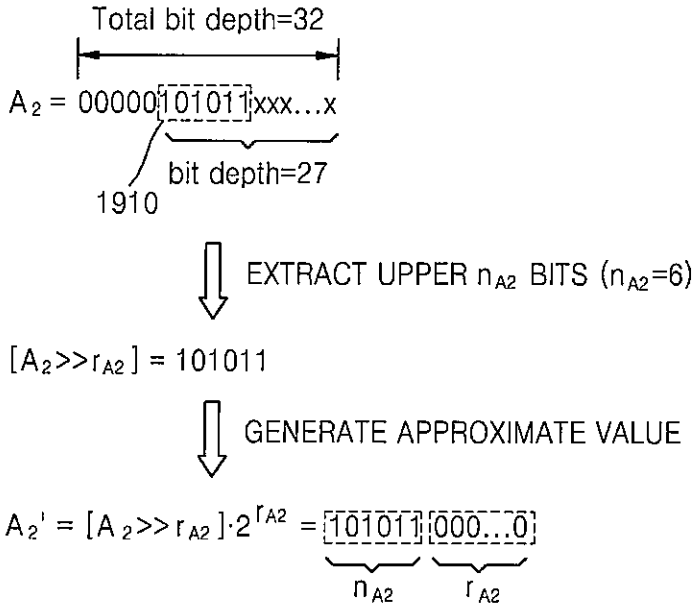
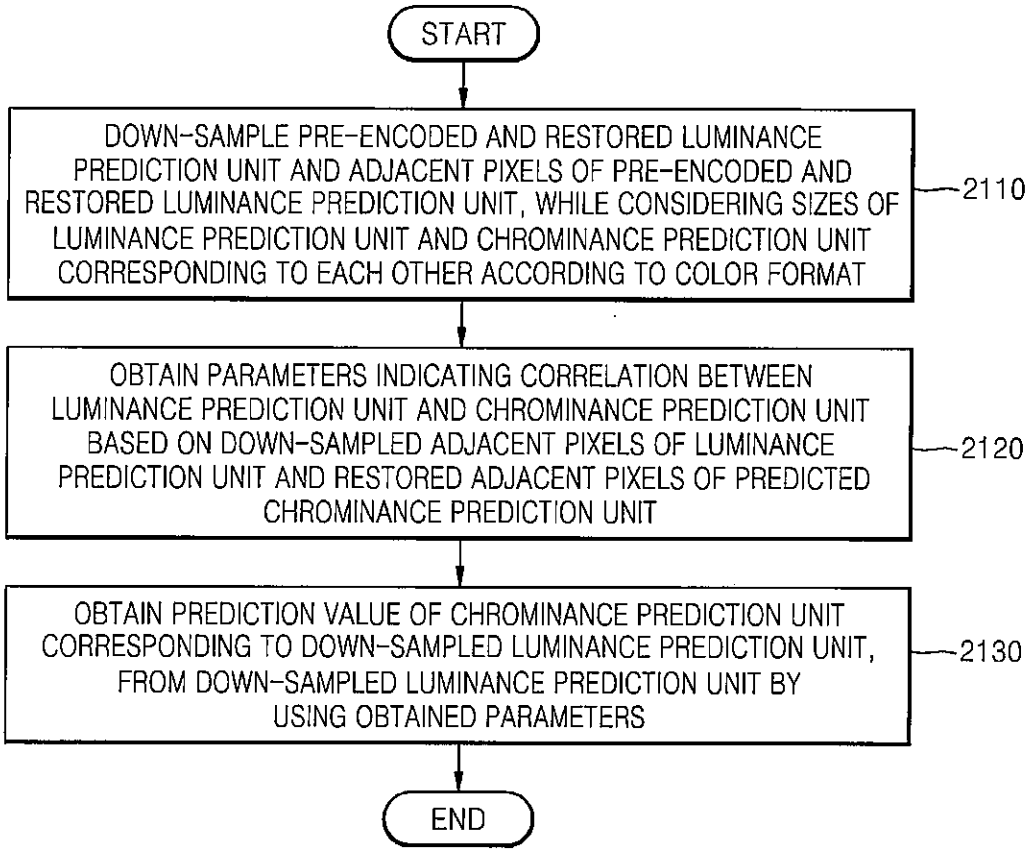


FIG. 20

$[A_2>>r_{A2}]$	$\frac{2^{n_{table}}}{[A_2>>r_{A2}]}$
000000	xxx
000001	xxx
. . .	. . .
111111	xxx

64

FIG. 21


START
DOWN-SAMPLE PRE-ENCODED AND RESTORED LUMINANCE PREDICTION UNIT AND ADJACENT PIXELS OF PRE-ENCODED AND RESTORED LUMINANCE PREDICTION UNIT, WHILE CONSIDERING SIZES OF LUMINANCE PREDICTION UNIT AND CHROMINANCE PREDICTION UNIT CORRESPONDING TO EACH OTHER ACCORDING TO COLOR FORMAT
2110
OBTAIN PARAMETERS INDICATING CORRELATION BETWEEN LUMINANCE PREDICTION UNIT AND CHROMINANCE PREDICTION UNIT BASED ON DOWN-SAMPLED ADJACENT PIXELS OF LUMINANCE PREDICTION UNIT AND RESTORED ADJACENT PIXELS OF PREDICTED CHROMINANCE PREDICTION UNIT
2120
OBTAIN PREDICTION VALUE OF CHROMINANCE PREDICTION UNIT CORRESPONDING TO DOWN-SAMPLED LUMINANCE PREDICTION UNIT, FROM DOWN-SAMPLED LUMINANCE PREDICTION UNIT BY USING OBTAINED PARAMETERS
2130
END