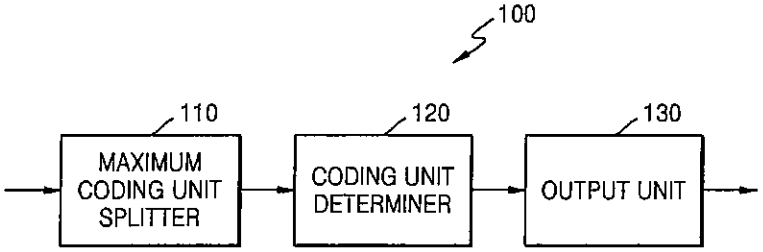
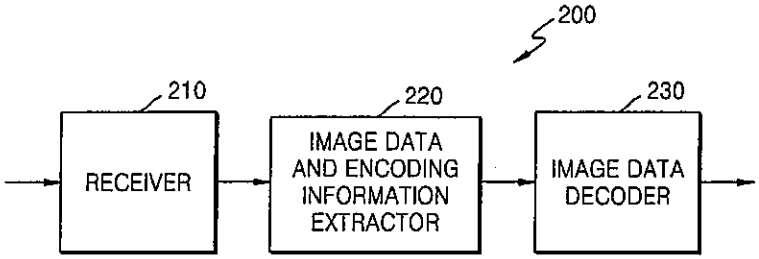
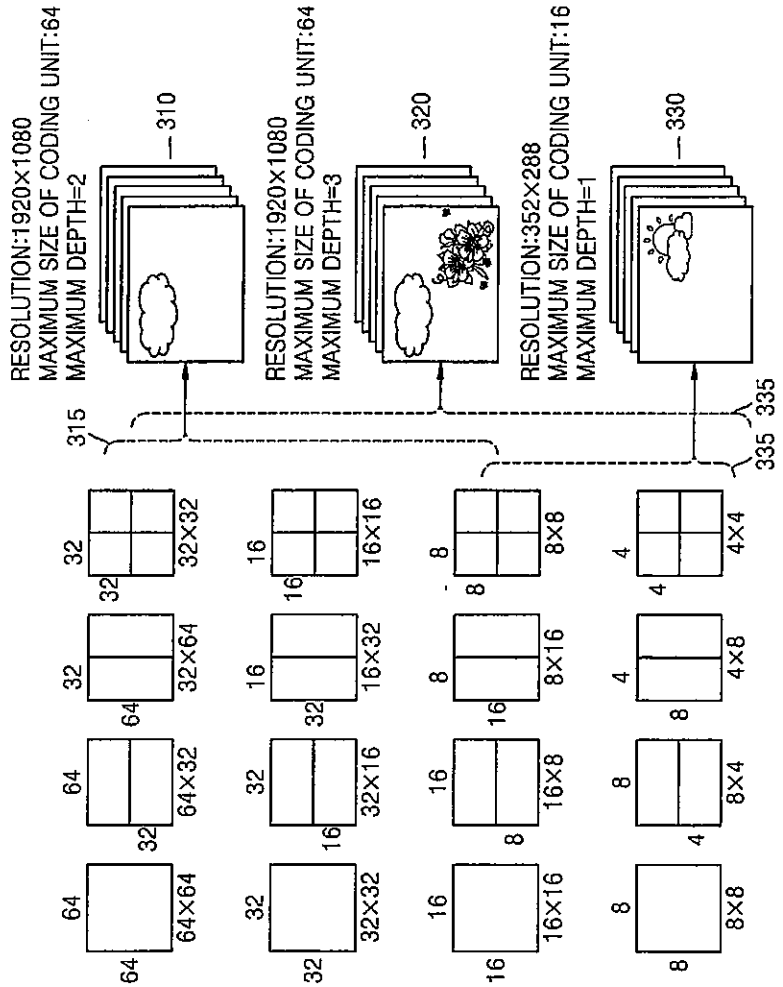
[Fig. 1]



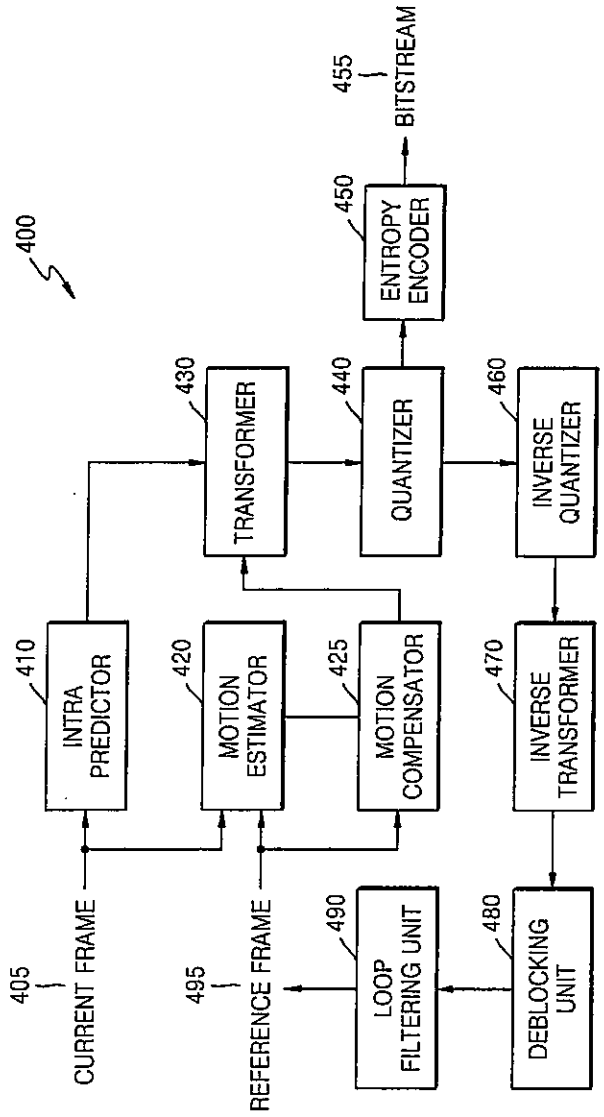
[Fig. 2]



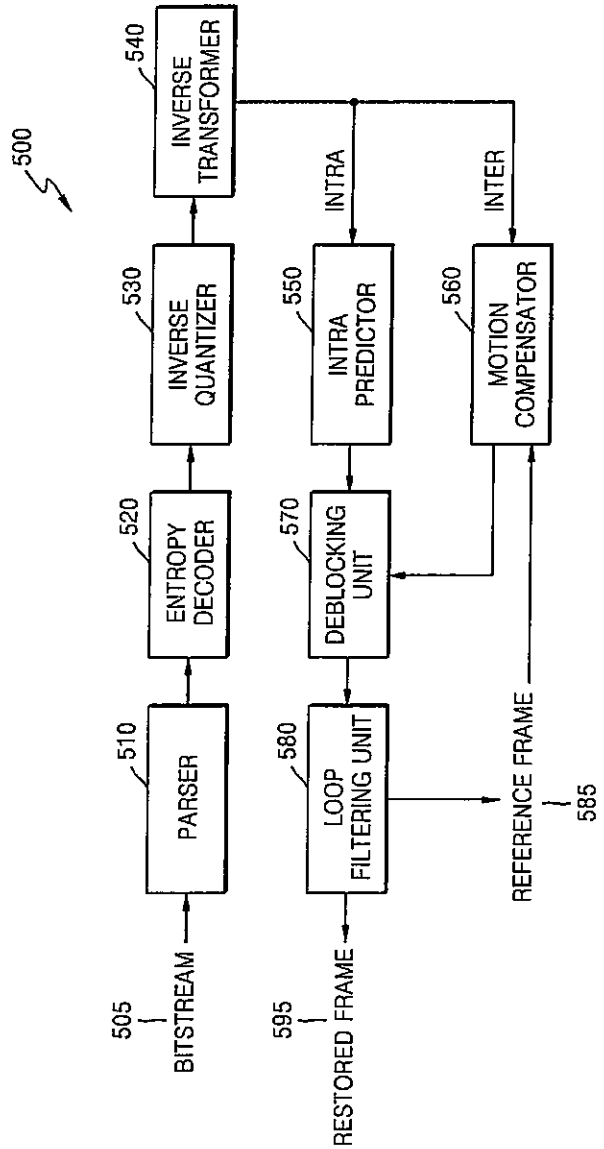
[Fig. 3]



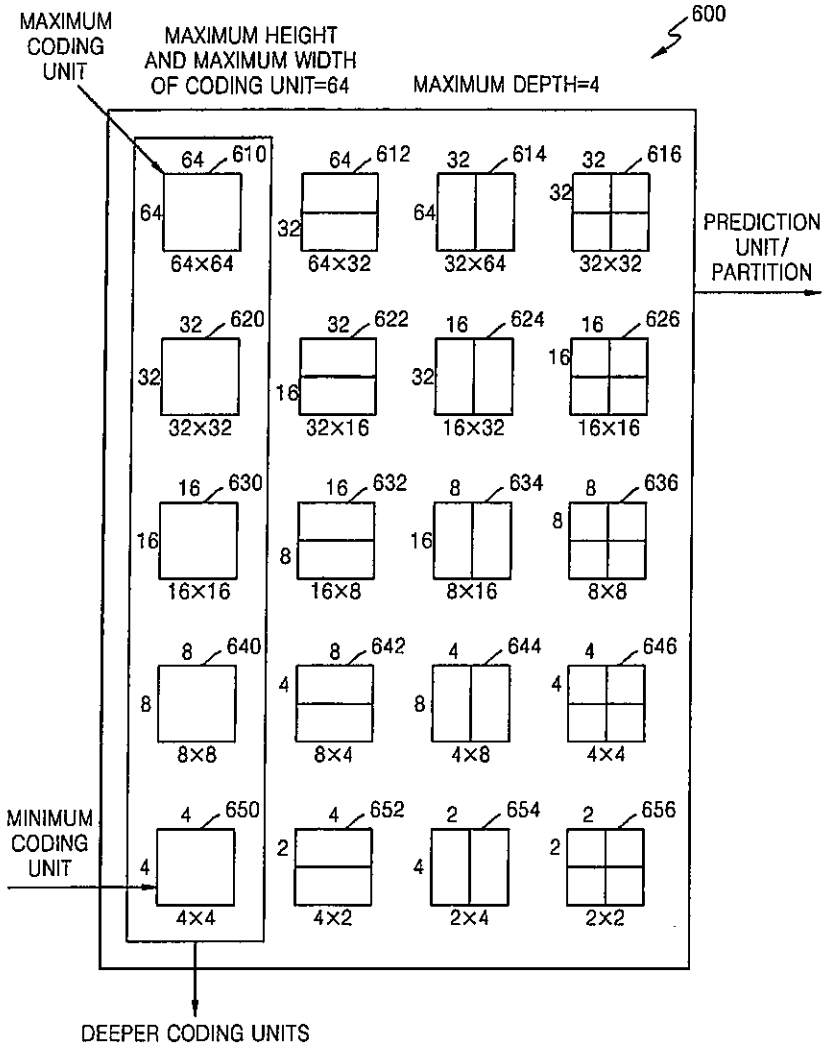
[Fig. 4]


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

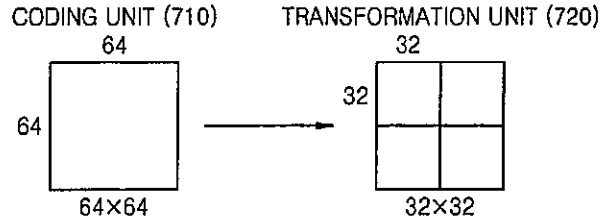
[Fig. 5]


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

[Fig. 6]

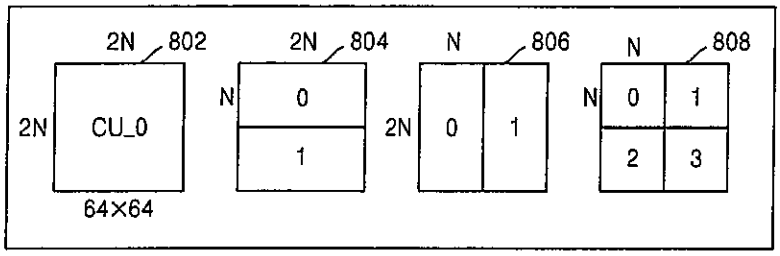

600
MAXIMUM CODING UNIT
MAXIMUM HEIGHT AND MAXIMUM WIDTH OF CODING UNIT=64
MAXIMUM DEPTH=4
PREDICTION UNIT/ PARTITION
64 610
64×64
64 612
64×32
32 614
32×64
32 616
32×32
32 620
32×32
32 622
32×16
16 624
16×32
16 626
16×16
16 630
16×16
16 632
16×8
8 634
8×16
8 636
8×8
8 640
8×8
8 642
8×4
4 644
4×8
4 646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

[Fig. 7]

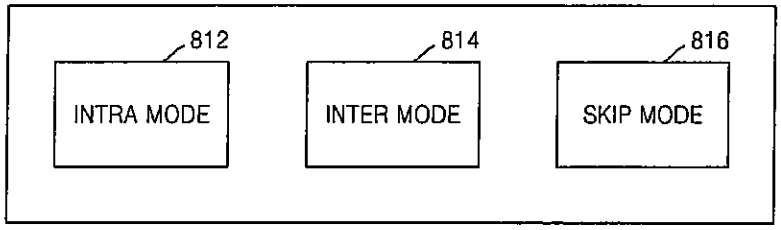

CODING UNIT (710)
TRANSFORMATION UNIT (720)
64
64
64×64
32
32
32×32

[Fig. 8]

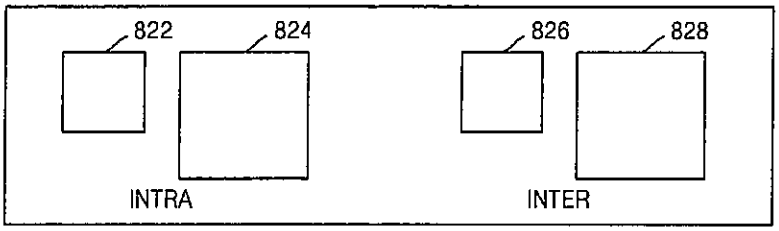
'PARTITION TYPE'-INFORMATION (800)



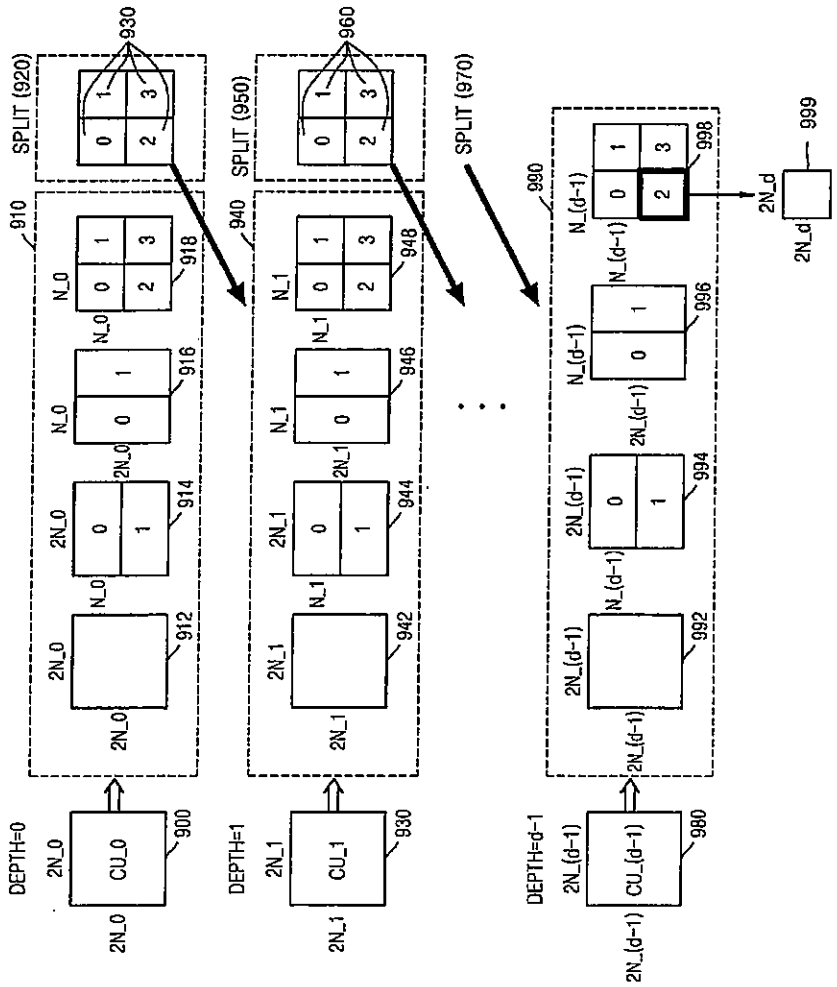
'PREDICTION MODE'-INFORMATION (810)



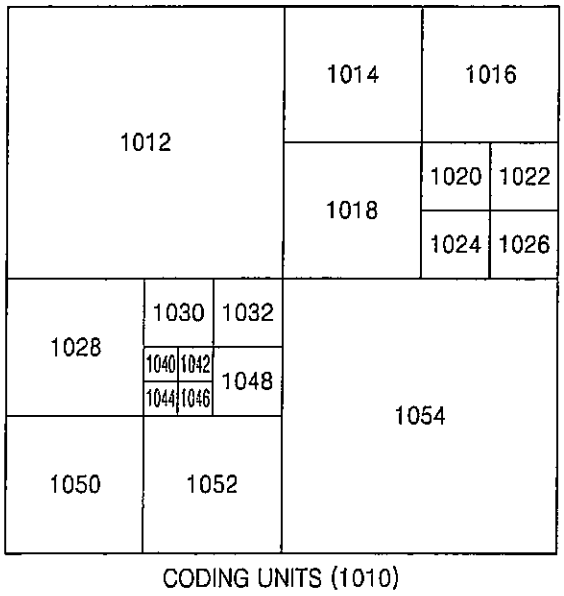
'SIZE OF TRANSFORMATION UNIT'-INFORMATION (820)



[Fig. 9]

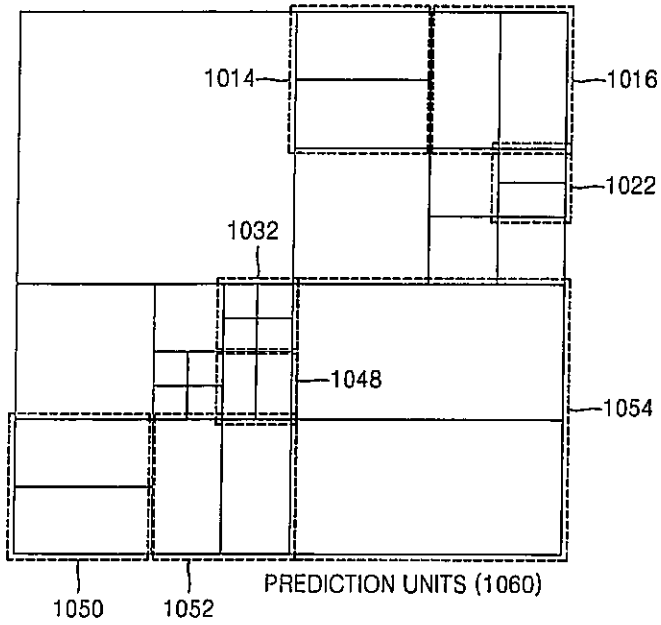


[Fig. 10]

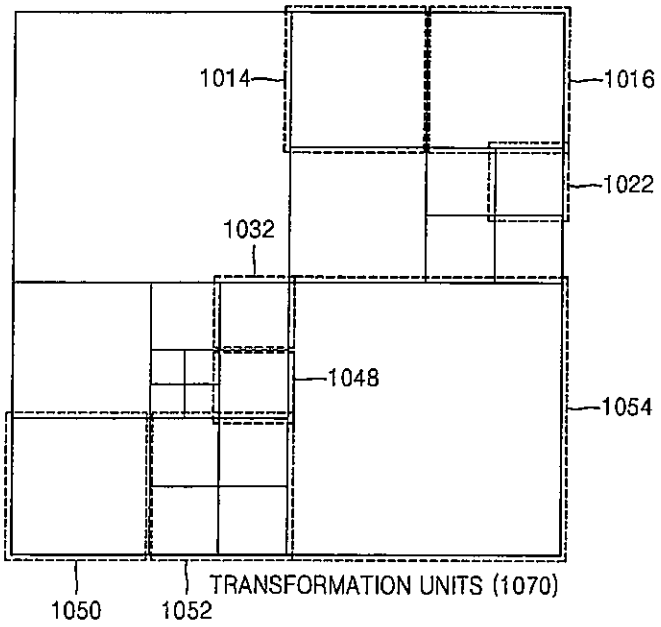


CODING UNITS (1010)

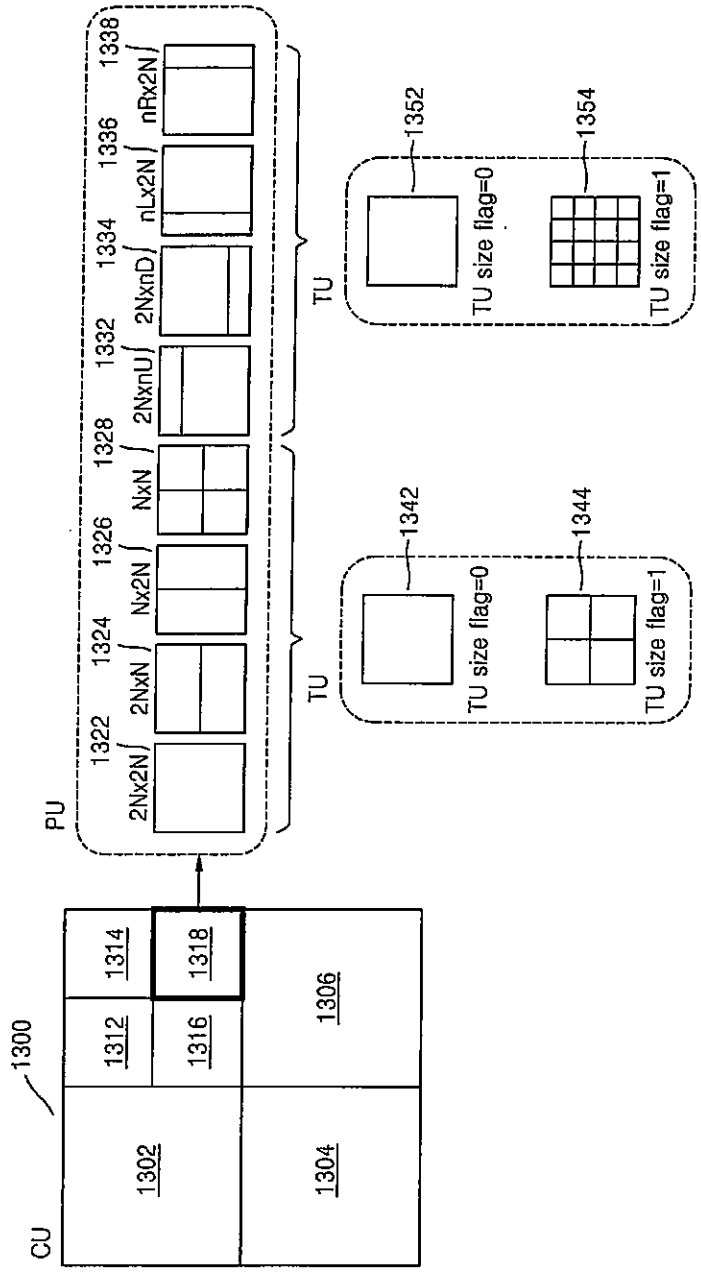
[Fig. 11]


1014
1016
1022
1032
1048
1054
1050
1052
PREDICTION UNITS (1060)

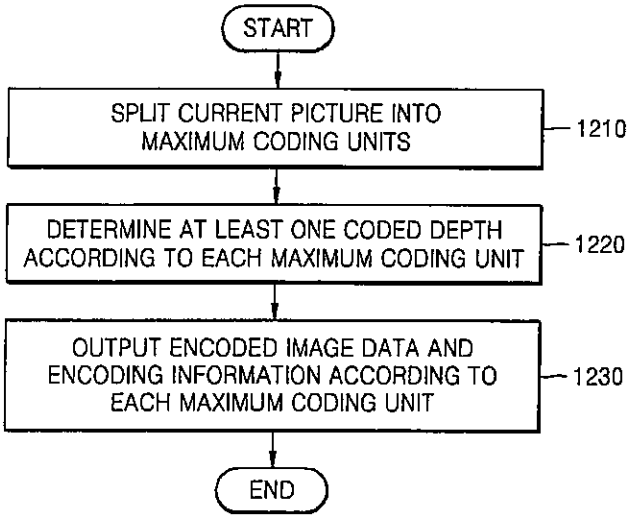
[Fig. 12]


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

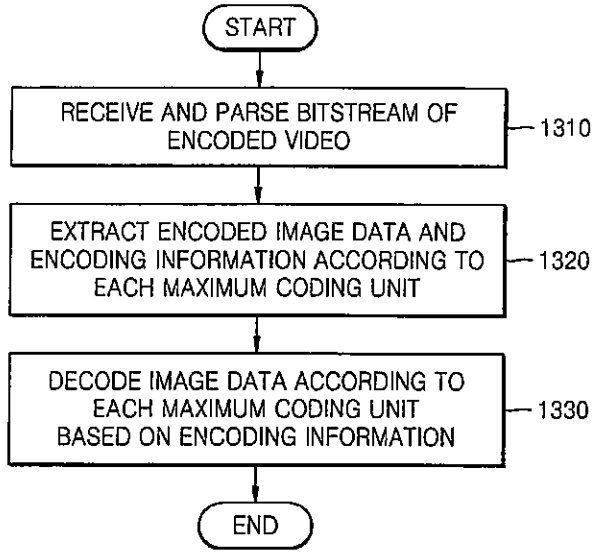
[Fig. 13]


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

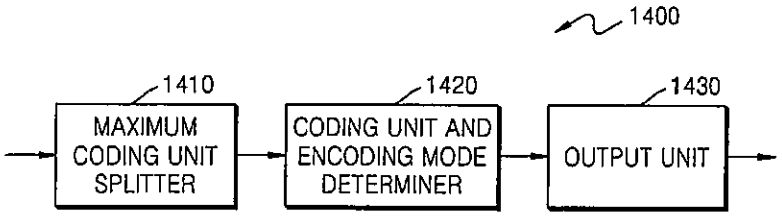
[Fig. 14]



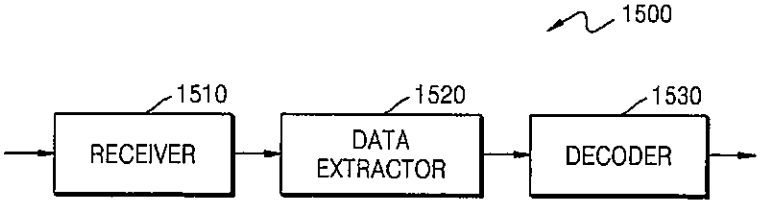
[Fig. 15]



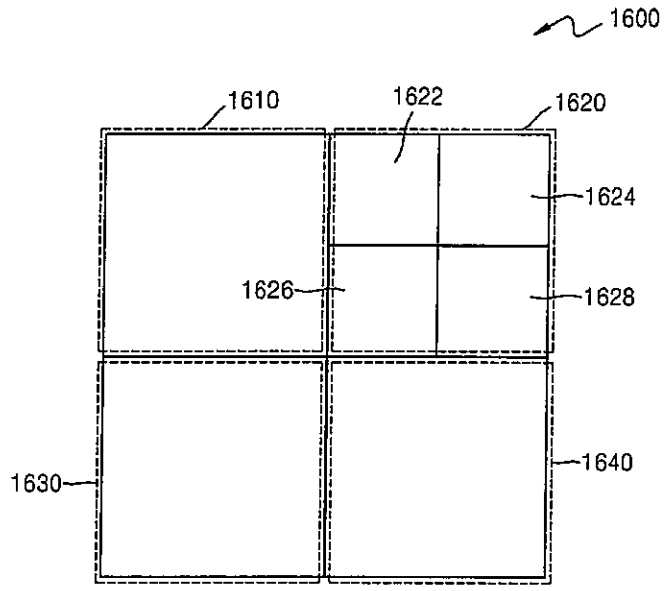
[Fig. 16]



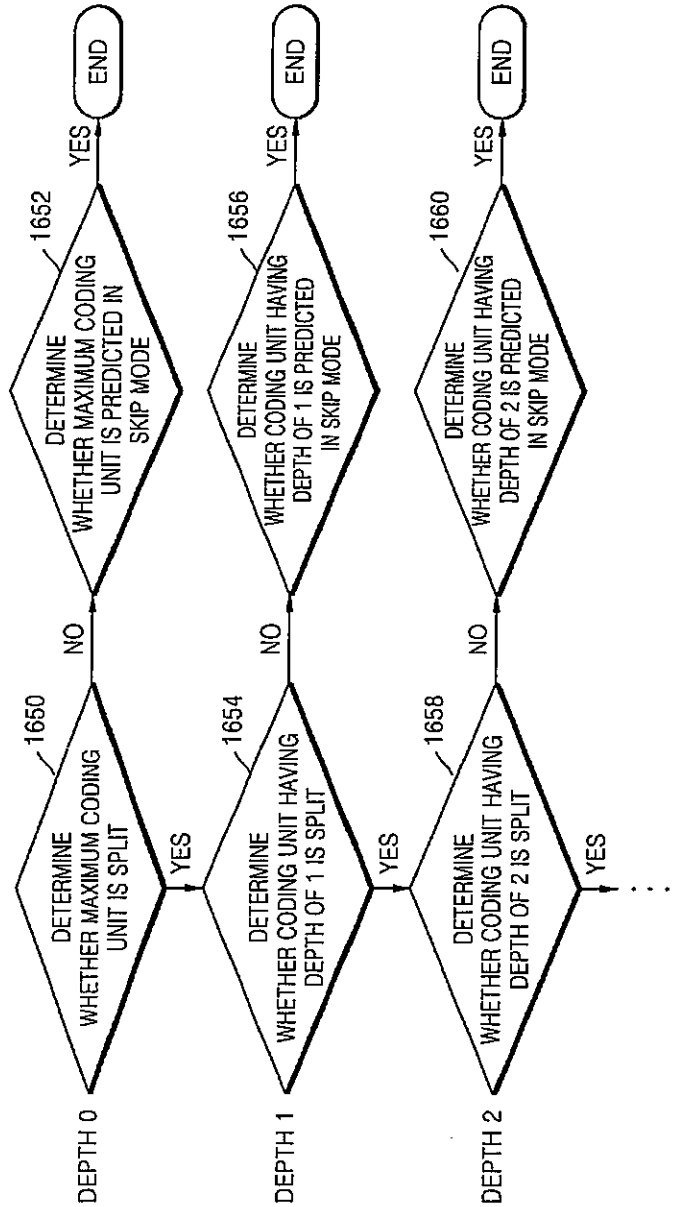
[Fig. 17]



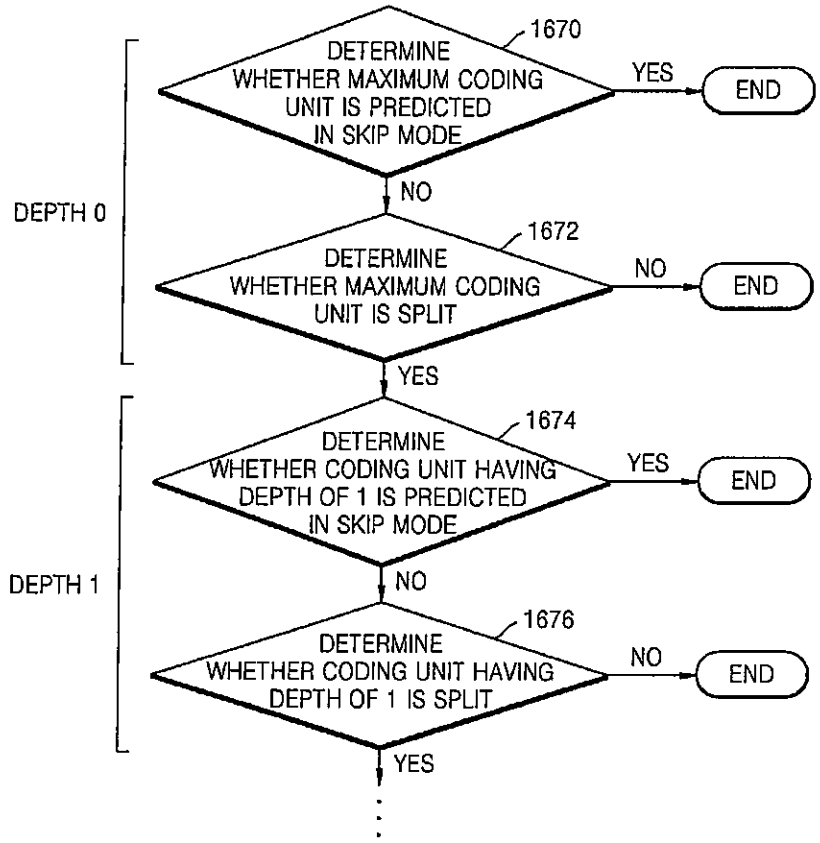
[Fig. 18]



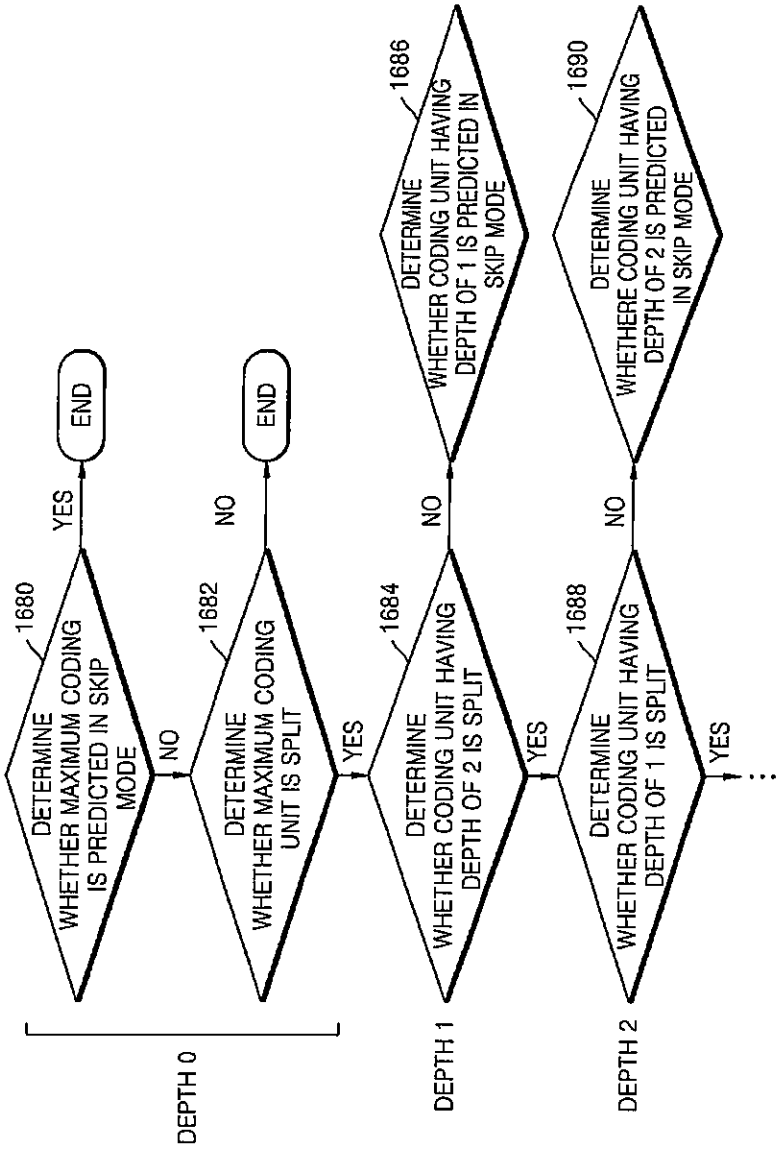
[Fig. 19]


DEPTH 0
DEPTH 1
DEPTH 2
1650
DETERMINE WHETHER MAXIMUM CODING UNIT IS SPLIT
1652
DETERMINE WHETHER MAXIMUM CODING UNIT IS PREDICTED IN SKIP MODE
1654
DETERMINE WHETHER CODING UNIT HAVING DEPTH OF 1 IS SPLIT
1656
DETERMINE WHETHER CODING UNIT HAVING DEPTH OF 1 IS PREDICTED IN SKIP MODE
1658
DETERMINE WHETHER CODING UNIT HAVING DEPTH OF 2 IS SPLIT
1660
DETERMINE WHETHER CODING UNIT HAVING DEPTH OF 2 IS PREDICTED IN SKIP MODE
NO
YES
END
...

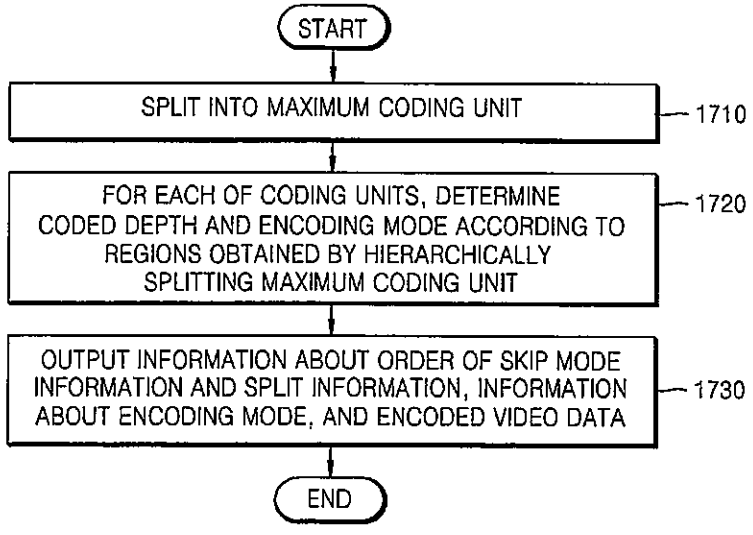
[Fig. 20]


DEPTH 0
DEPTH 1
1670
DETERMINE WHETHER MAXIMUM CODING UNIT IS PREDICTED IN SKIP MODE
YES
END
NO
1672
DETERMINE WHETHER MAXIMUM CODING UNIT IS SPLIT
NO
END
YES
1674
DETERMINE WHETHER CODING UNIT HAVING DEPTH OF 1 IS PREDICTED IN SKIP MODE
YES
END
NO
1676
DETERMINE WHETHER CODING UNIT HAVING DEPTH OF 1 IS SPLIT
NO
END
YES

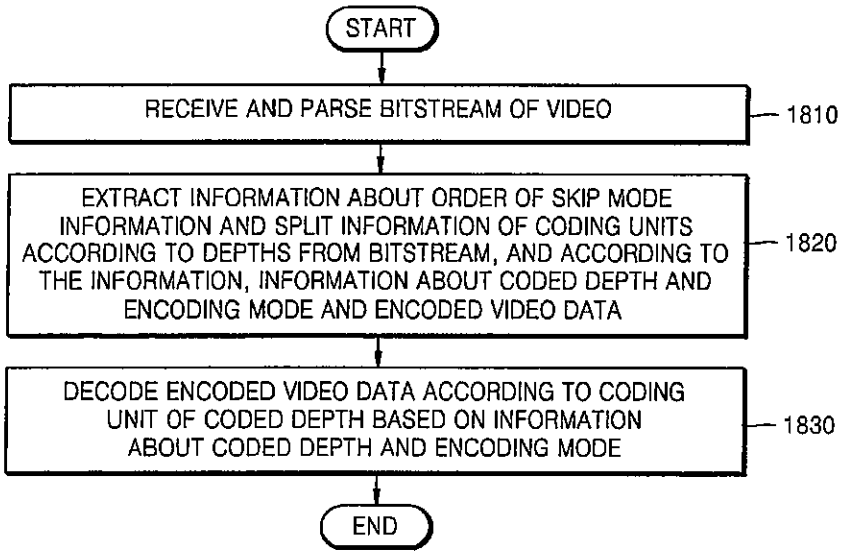
[Fig. 21]


DETERMINE WHETHER MAXIMUM CODING IS PREDICTED IN SKIP MODE
1680
YES
END
NO
DETERMINE WHETHER MAXIMUM CODING UNIT IS SPLIT
1682
NO
END
YES
DETERMINE WHETHER CODING UNIT HAVING DEPTH OF 2 IS SPLIT
1684
NO
DETERMINE WHETHER CODING UNIT HAVING DEPTH OF 1 IS PREDICTED IN SKIP MODE
1686
YES
DETERMINE WHETHER CODING UNIT HAVING DEPTH OF 1 IS SPLIT
1688
NO
DETERMINE WHETHERE CODING UNIT HAVING DEPTH OF 2 IS PREDICTED IN SKIP MODE
1690
YES
...
DEPTH 0
DEPTH 1
DEPTH 2

[Fig. 22]


START
SPLIT INTO MAXIMUM CODING UNIT
1710
FOR EACH OF CODING UNITS, DETERMINE CODED DEPTH AND ENCODING MODE ACCORDING TO REGIONS OBTAINED BY HIERARCHICALLY SPLITTING MAXIMUM CODING UNIT
1720
OUTPUT INFORMATION ABOUT ORDER OF SKIP MODE INFORMATION AND SPLIT INFORMATION, INFORMATION ABOUT ENCODING MODE, AND ENCODED VIDEO DATA
1730
END

[Fig. 23]


START
RECEIVE AND PARSE BITSTREAM OF VIDEO
1810
EXTRACT INFORMATION ABOUT ORDER OF SKIP MODE INFORMATION AND SPLIT INFORMATION OF CODING UNITS ACCORDING TO DEPTHS FROM BITSTREAM, AND ACCORDING TO THE INFORMATION, INFORMATION ABOUT CODED DEPTH AND ENCODING MODE AND ENCODED VIDEO DATA
1820
DECODE ENCODED VIDEO DATA ACCORDING TO CODING UNIT OF CODED DEPTH BASED ON INFORMATION ABOUT CODED DEPTH AND ENCODING MODE
1830
END