FIG. 1

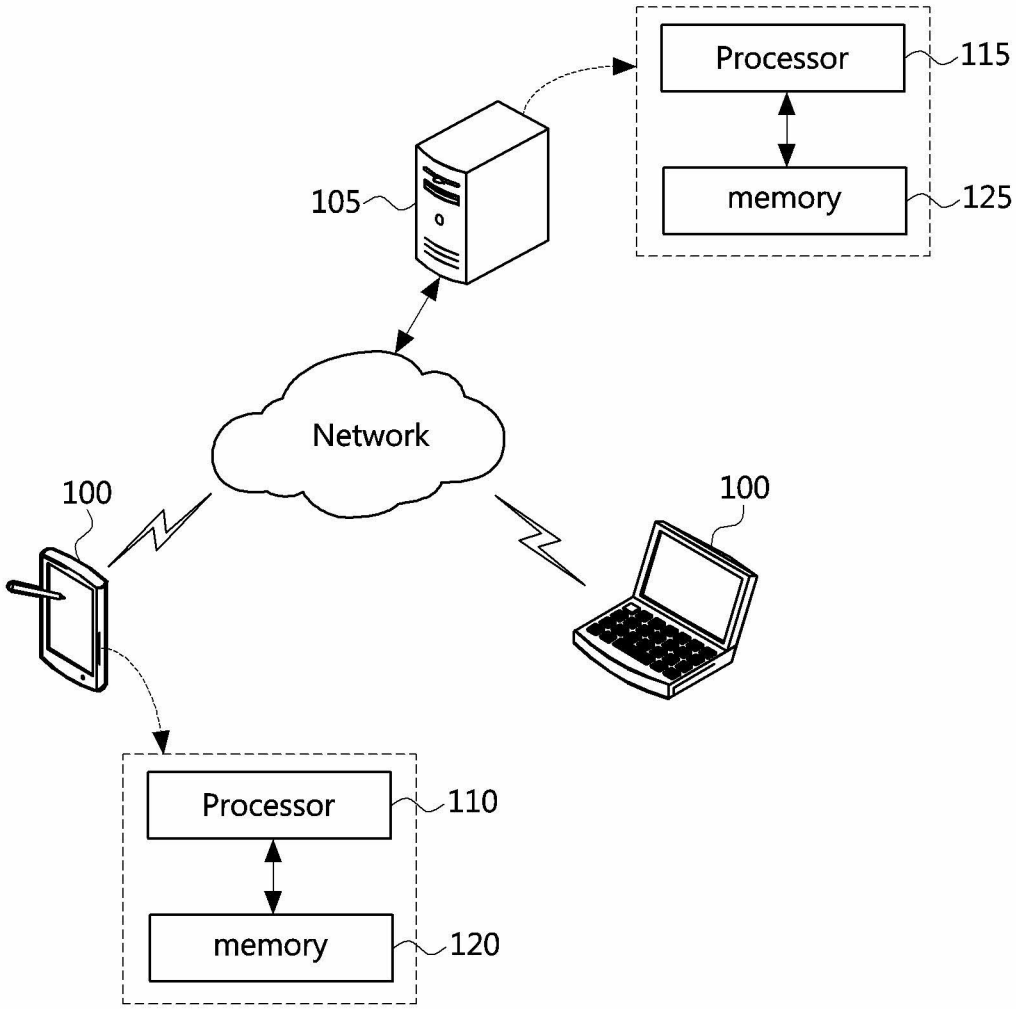

Processor
115
memory
125
105
Network
100
100
Processor
110
memory
120

FIG. 2

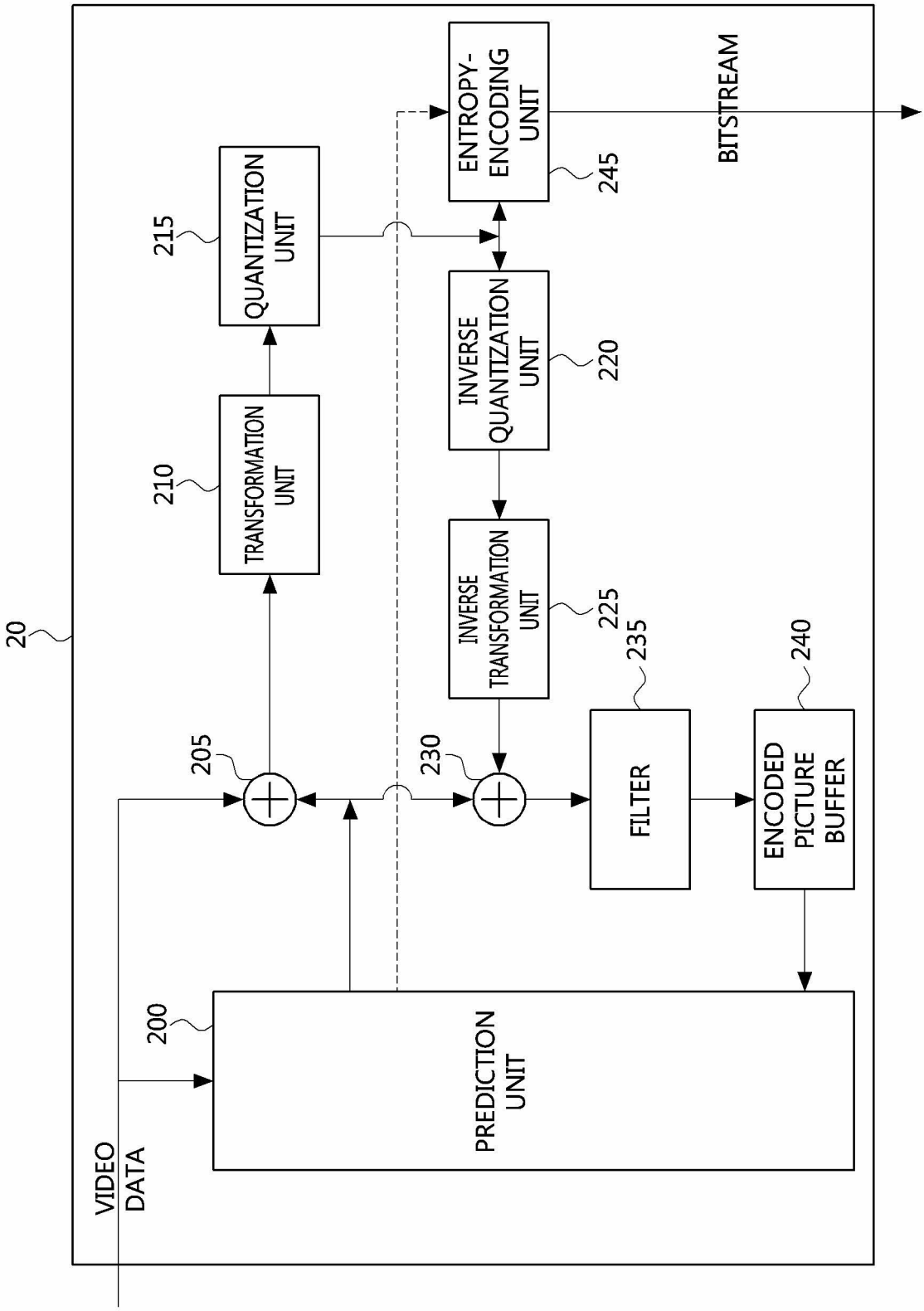

20
VIDEO DATA
PREDICTION UNIT
200
TRANSFORMATION UNIT
210
QUANTIZATION UNIT
215
ENTROPY-ENCODING UNIT
245
BITSTREAM
INVERSE QUANTIZATION UNIT
220
INVERSE TRANSFORMATION UNIT
225
FILTER
235
ENCODED PICTURE BUFFER
240
205
230

FIG. 3

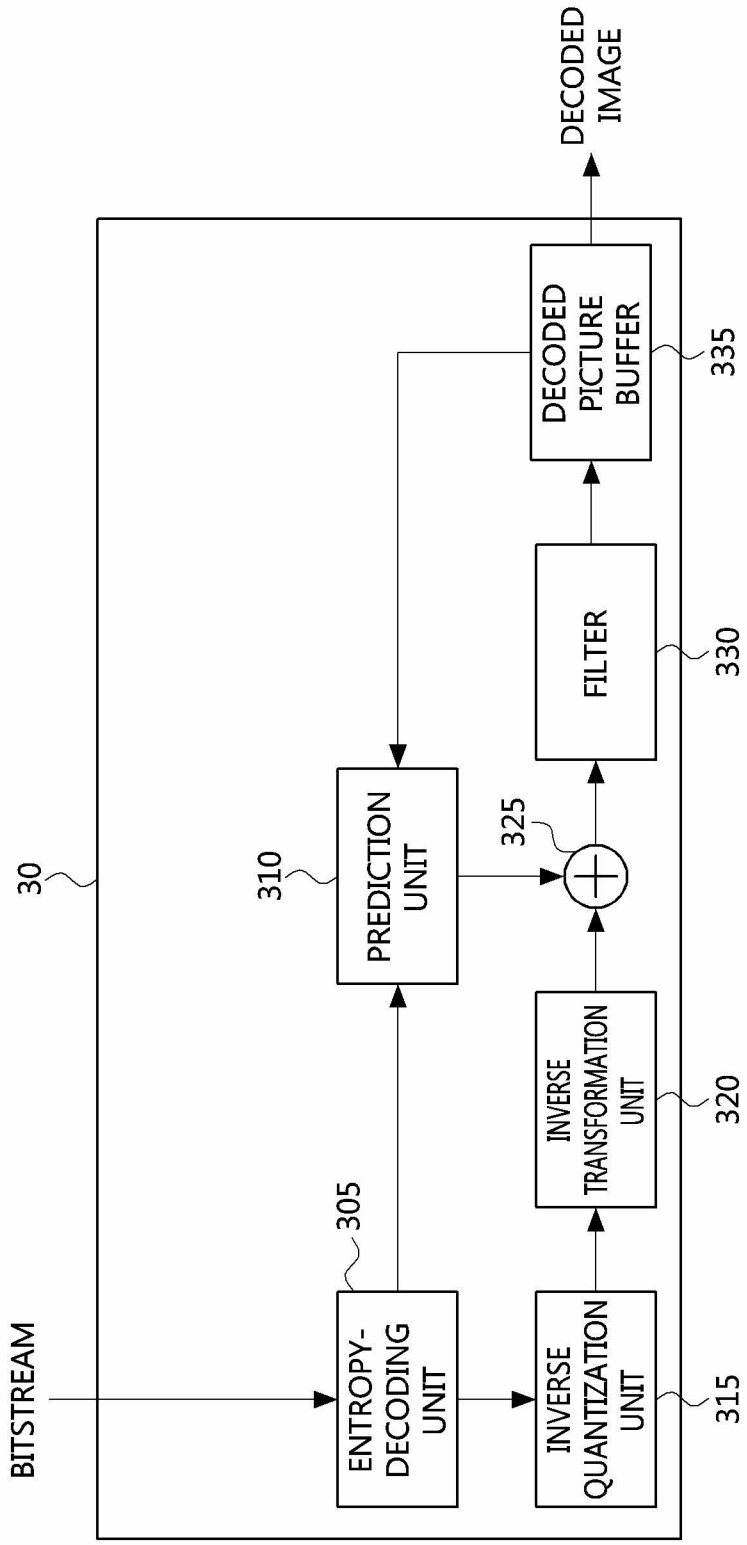

BITSTREAM
30
ENTROPY-DECODING UNIT
305
INVERSE QUANTIZATION UNIT
315
INVERSE TRANSFORMATION UNIT
320
PREDICTION UNIT
310
325
FILTER
330
DECODED PICTURE BUFFER
335
DECODED IMAGE

FIG. 4

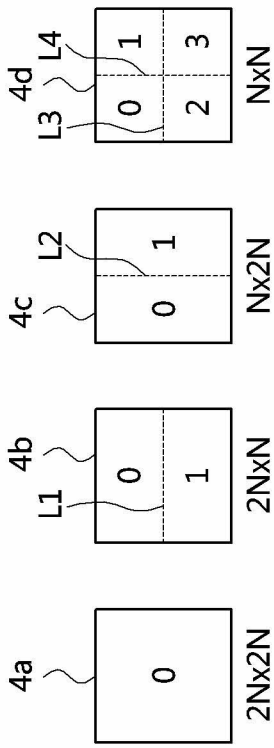

4a
0
2Nx2N
4b
L1
0
1
2NxN
4c
L2
0
1
Nx2N
4d
L3
L4
0
1
2
3
NxN

FIG. 5

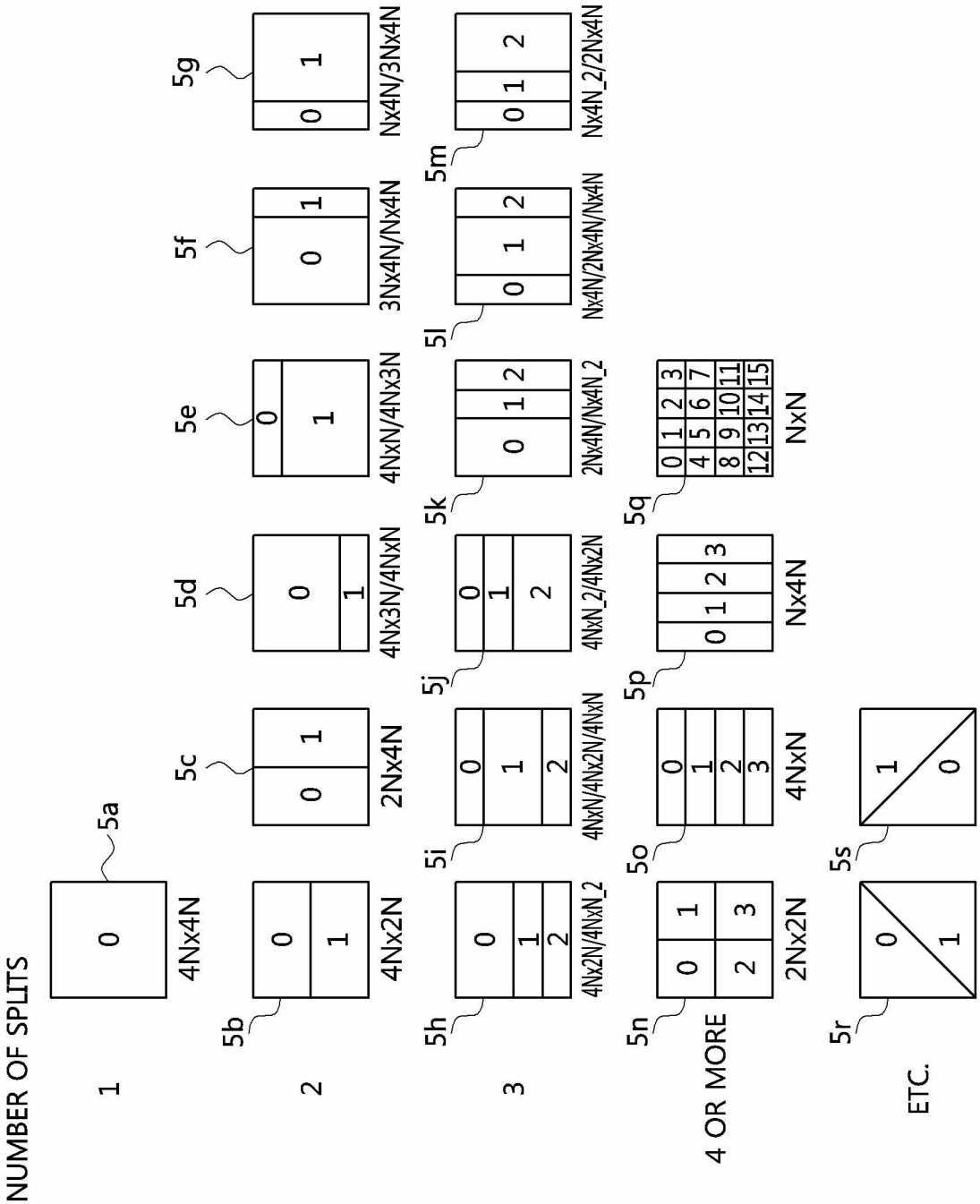

NUMBER OF SPLITS
1
2
3
4 OR MORE
ETC.
5a
4Nx4N
5b
4Nx2N
5c
2Nx4N
5d
4Nx3N/4NxN
5e
4NxN/4Nx3N
5f
3Nx4N/Nx4N
5g
Nx4N/3Nx4N
5h
4Nx2N/4NxN_2
5i
4NxN/4Nx2N/4NxN
5j
4NxN_2/4Nx2N
5k
2Nx4N/Nx4N_2
5l
Nx4N/2Nx4N/Nx4N
5m
Nx4N_2/2Nx4N
5n
2Nx2N
5o
4NxN
5p
Nx4N
5q
NxN
5r
5s

FIG. 6

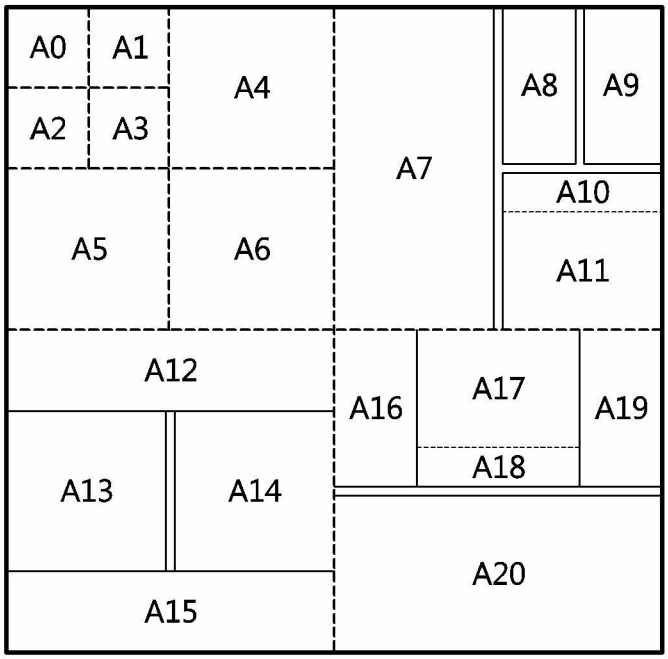

A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
A14
A15
A16
A17
A18
A19
A20

FIG. 7

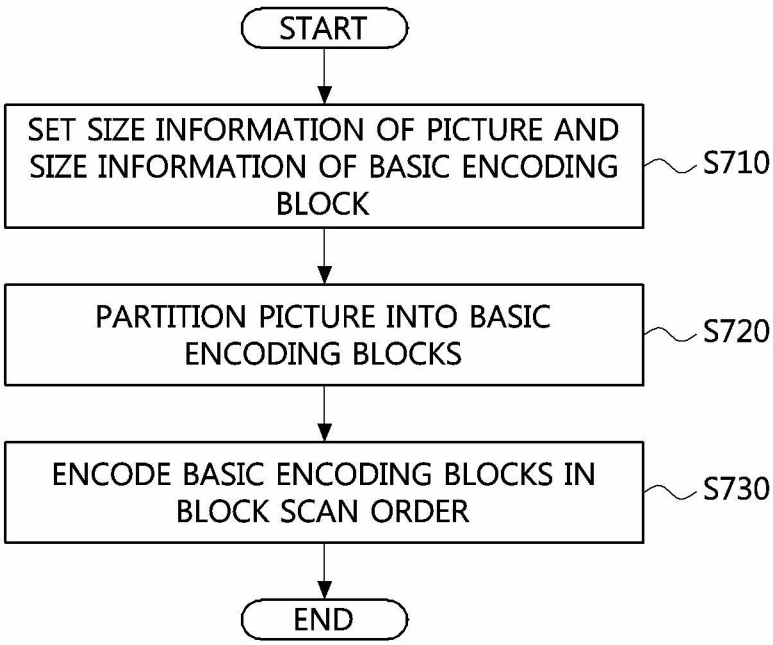

START
SET SIZE INFORMATION OF PICTURE AND SIZE INFORMATION OF BASIC ENCODING BLOCK
S710
PARTITION PICTURE INTO BASIC ENCODING BLOCKS
S720
ENCODE BASIC ENCODING BLOCKS IN BLOCK SCAN ORDER
S730
END

FIG. 8A

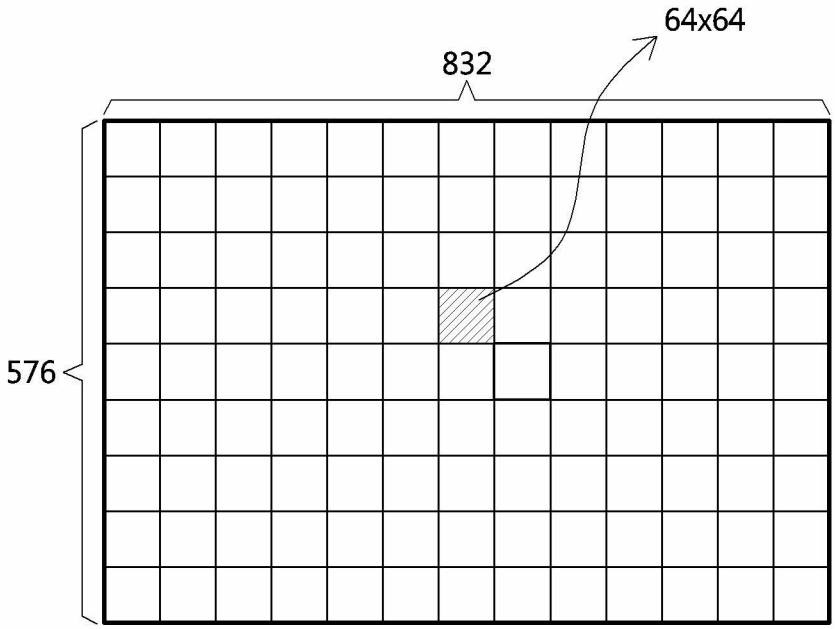


FIG. 8B

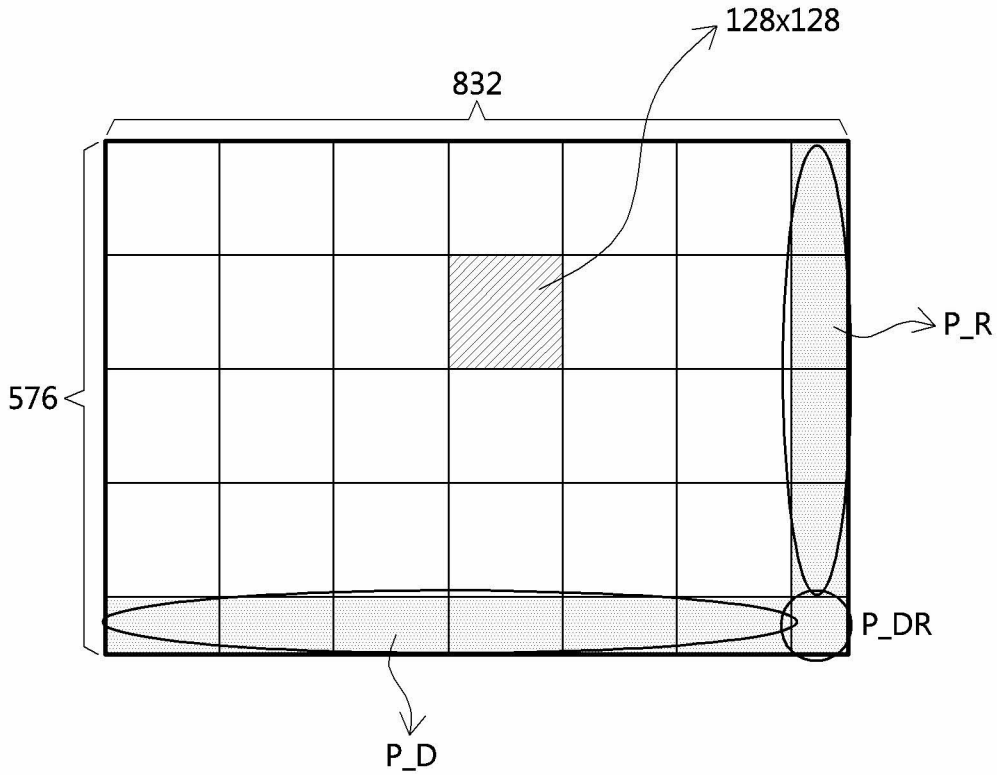


FIG. 9

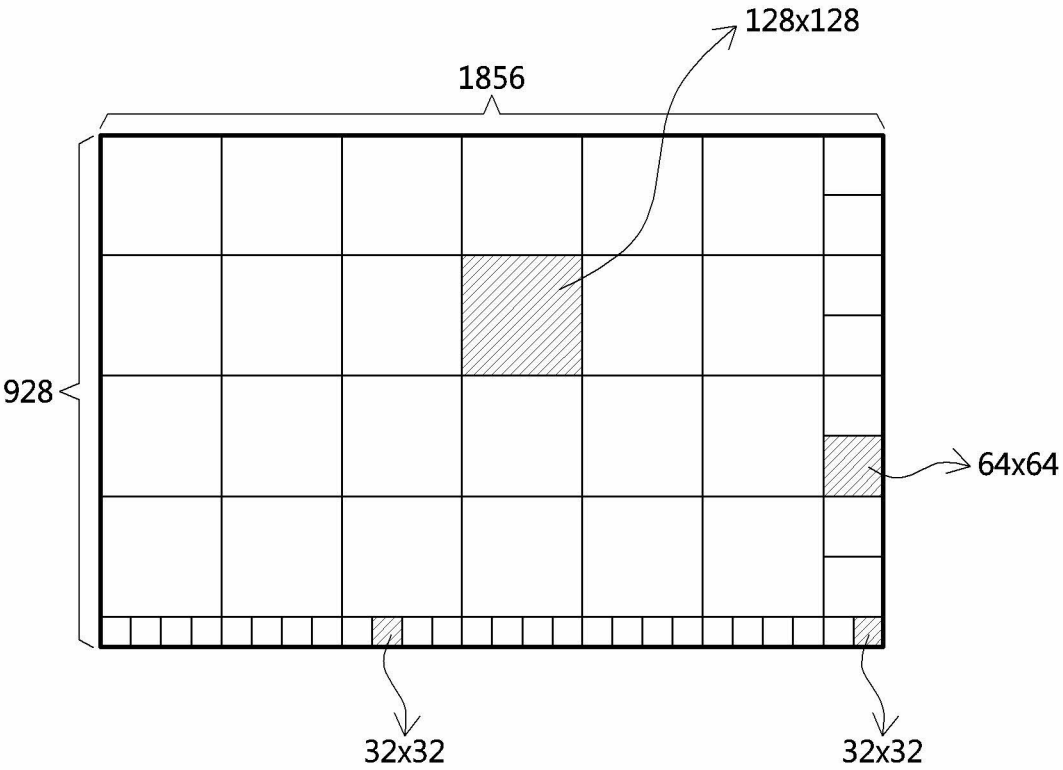

128x128
1856
928
64x64
32x32
32x32

FIG. 10

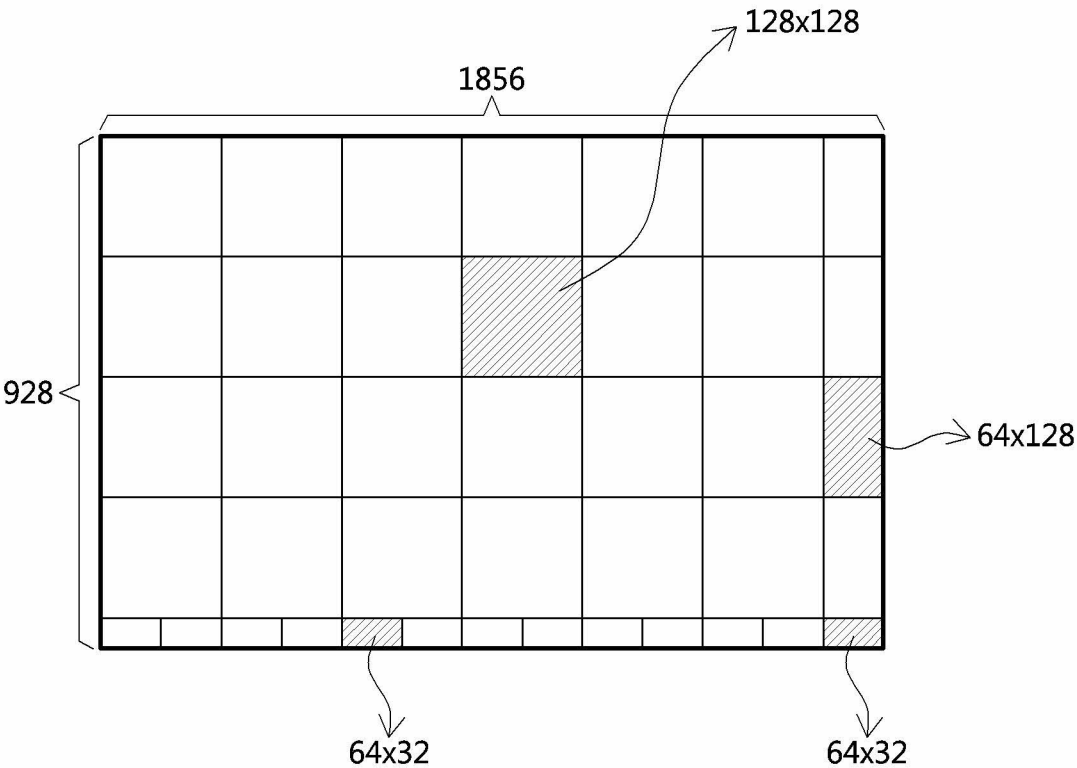

128x128
1856
928
64x128
64x32
64x32

FIG. 11A

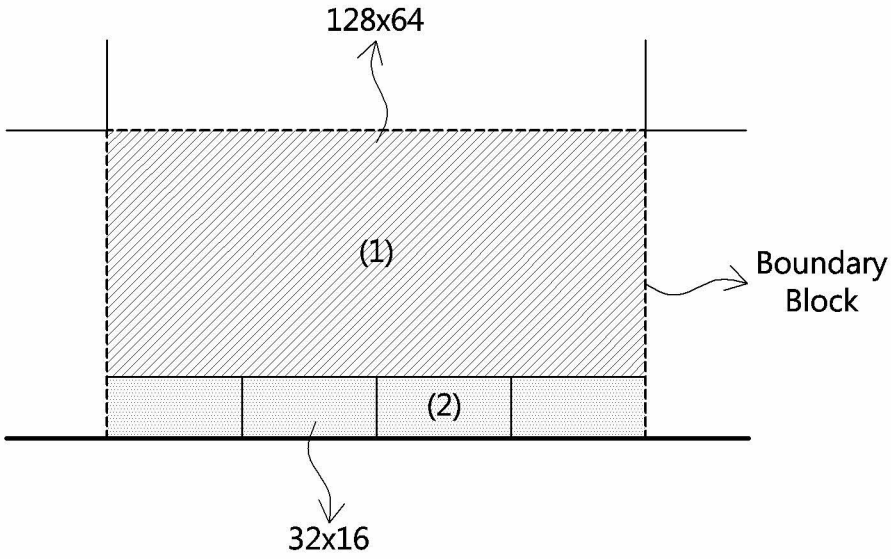


FIG. 11B

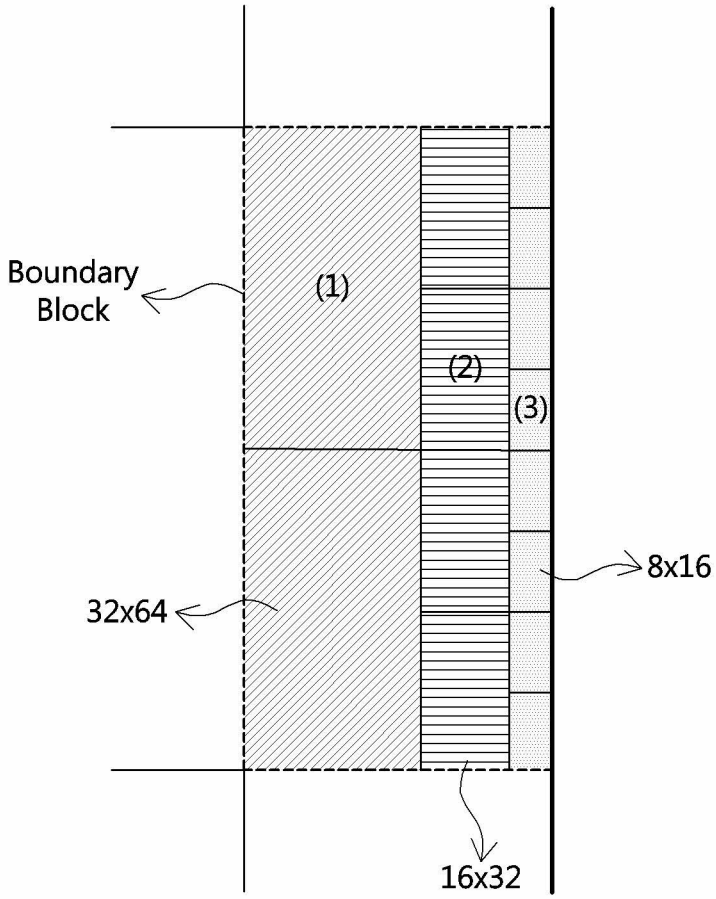


FIG. 12

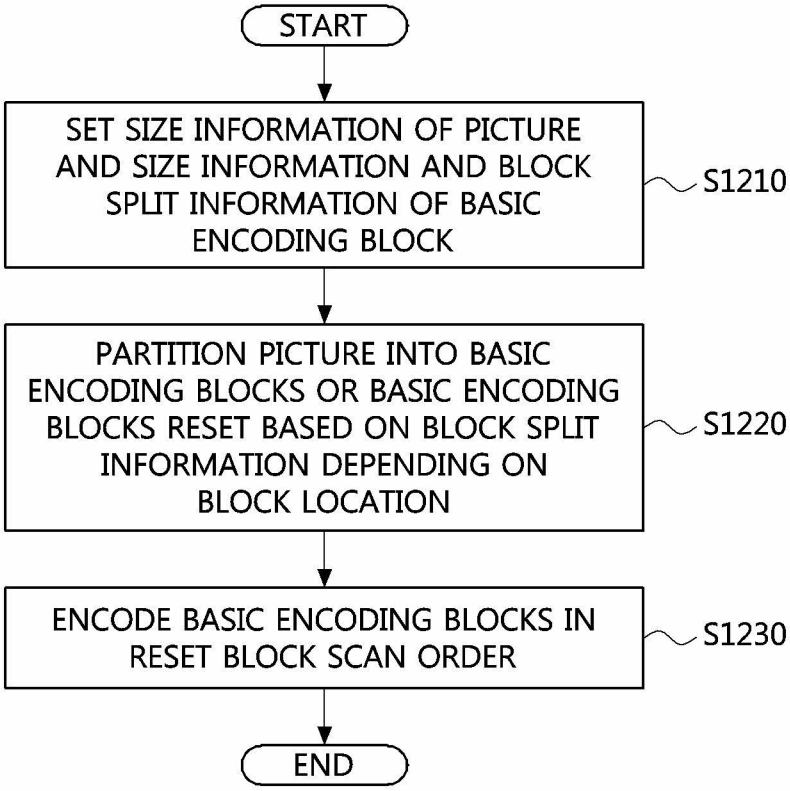

START
SET SIZE INFORMATION OF PICTURE AND SIZE INFORMATION AND BLOCK SPLIT INFORMATION OF BASIC ENCODING BLOCK
S1210
PARTITION PICTURE INTO BASIC ENCODING BLOCKS OR BASIC ENCODING BLOCKS RESET BASED ON BLOCK SPLIT INFORMATION DEPENDING ON BLOCK LOCATION
S1220
ENCODE BASIC ENCODING BLOCKS IN RESET BLOCK SCAN ORDER
S1230
END

FIG. 13A

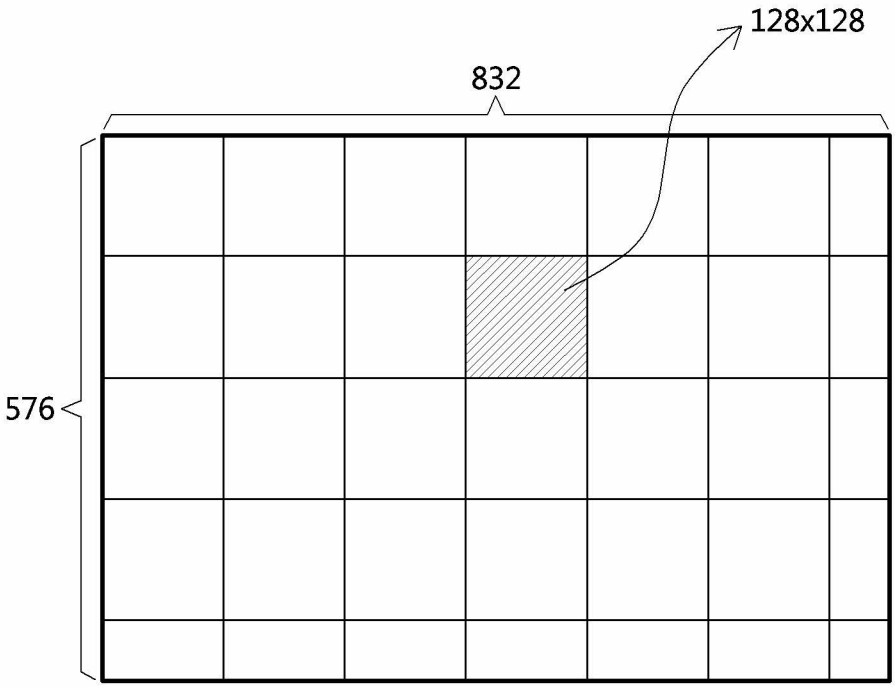


FIG. 13B

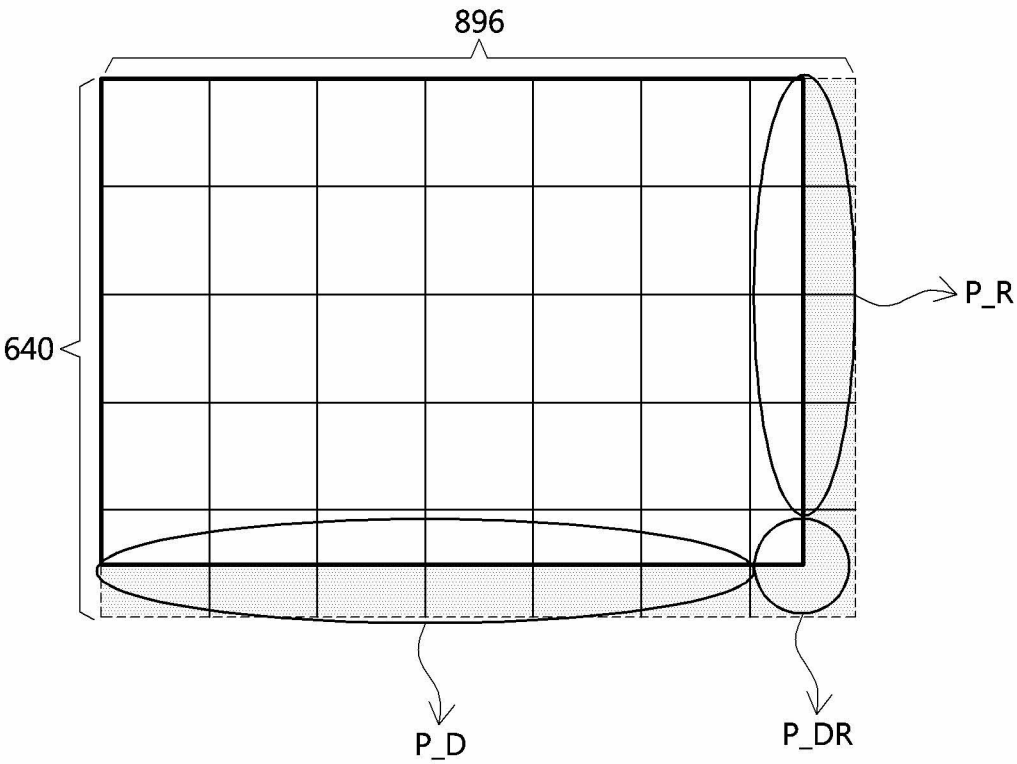


FIG. 14

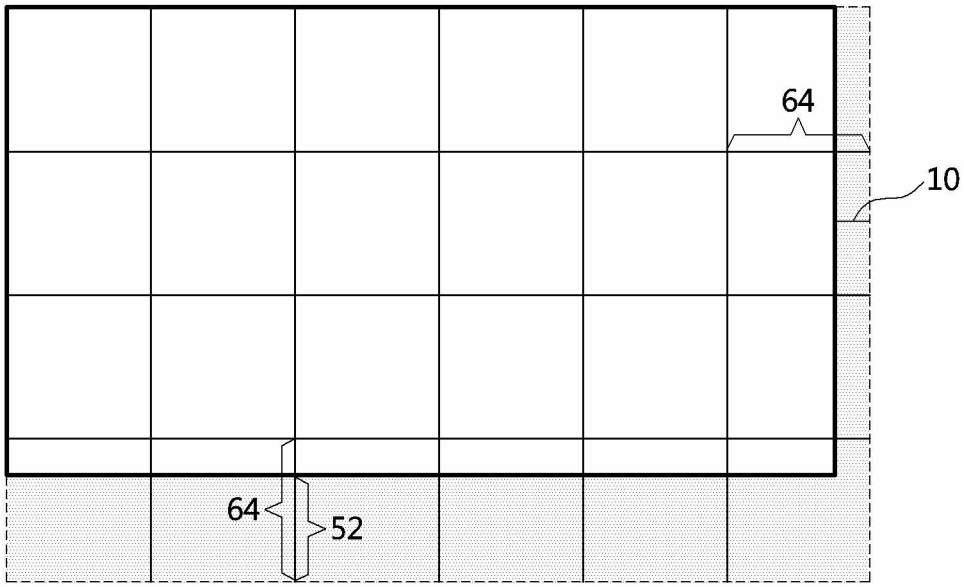


FIG. 15

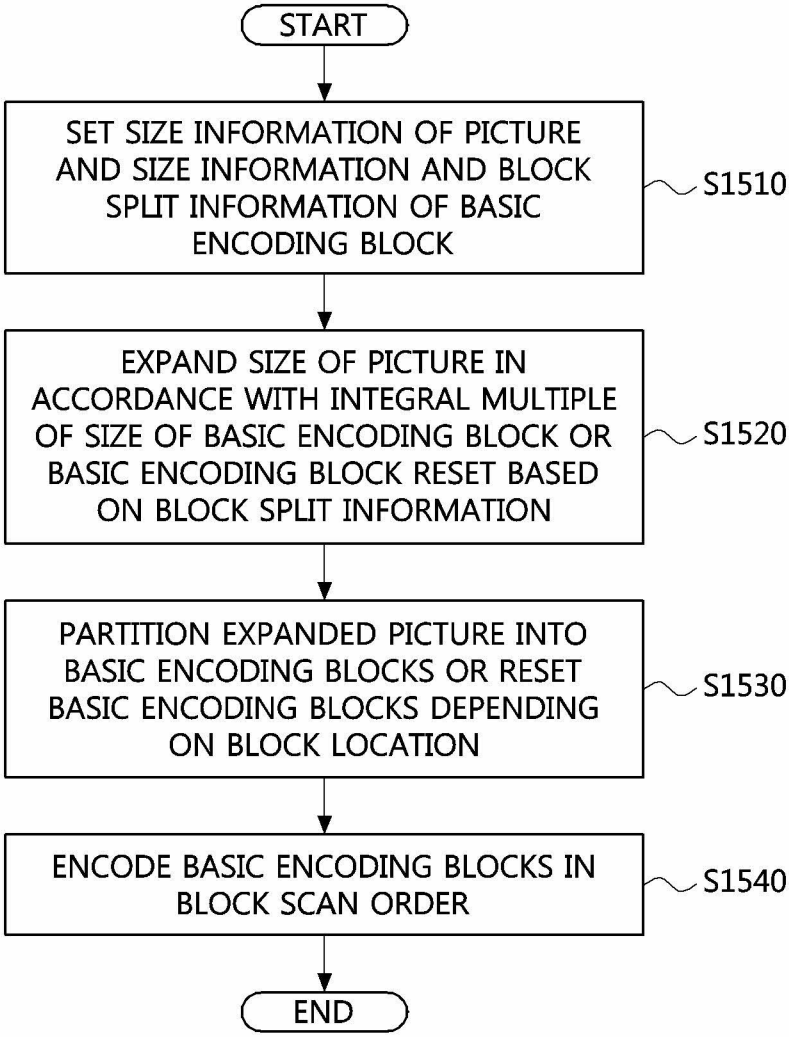

START
SET SIZE INFORMATION OF PICTURE AND SIZE INFORMATION AND BLOCK SPLIT INFORMATION OF BASIC ENCODING BLOCK
S1510
EXPAND SIZE OF PICTURE IN ACCORDANCE WITH INTEGRAL MULTIPLE OF SIZE OF BASIC ENCODING BLOCK OR BASIC ENCODING BLOCK RESET BASED ON BLOCK SPLIT INFORMATION
S1520
PARTITION EXPANDED PICTURE INTO BASIC ENCODING BLOCKS OR RESET BASIC ENCODING BLOCKS DEPENDING ON BLOCK LOCATION
S1530
ENCODE BASIC ENCODING BLOCKS IN BLOCK SCAN ORDER
S1540
END

FIG. 16A

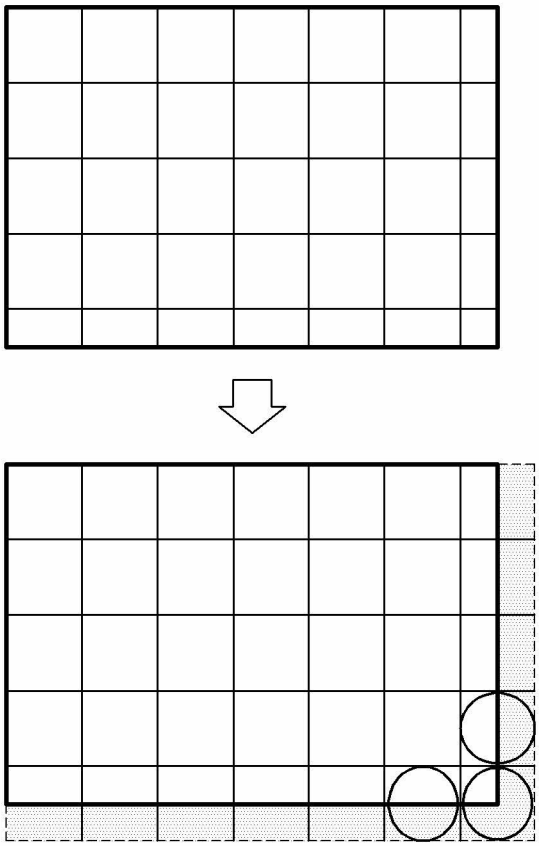


FIG. 16B

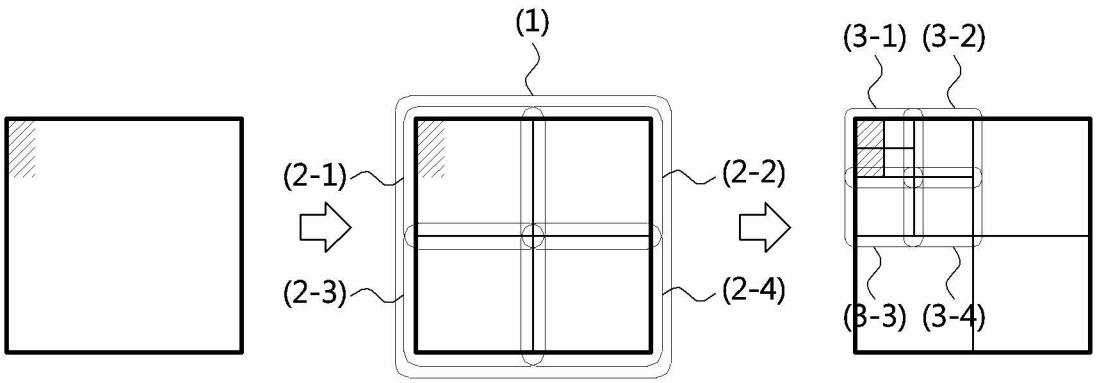


FIG. 16C

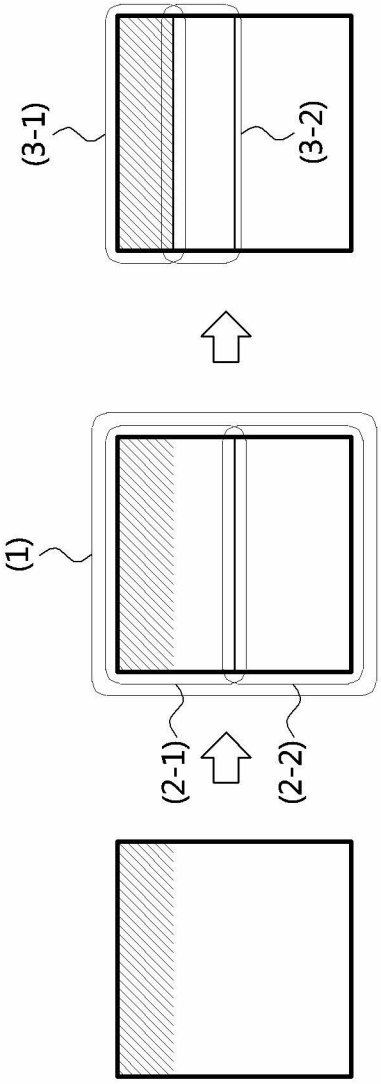


FIG. 16D

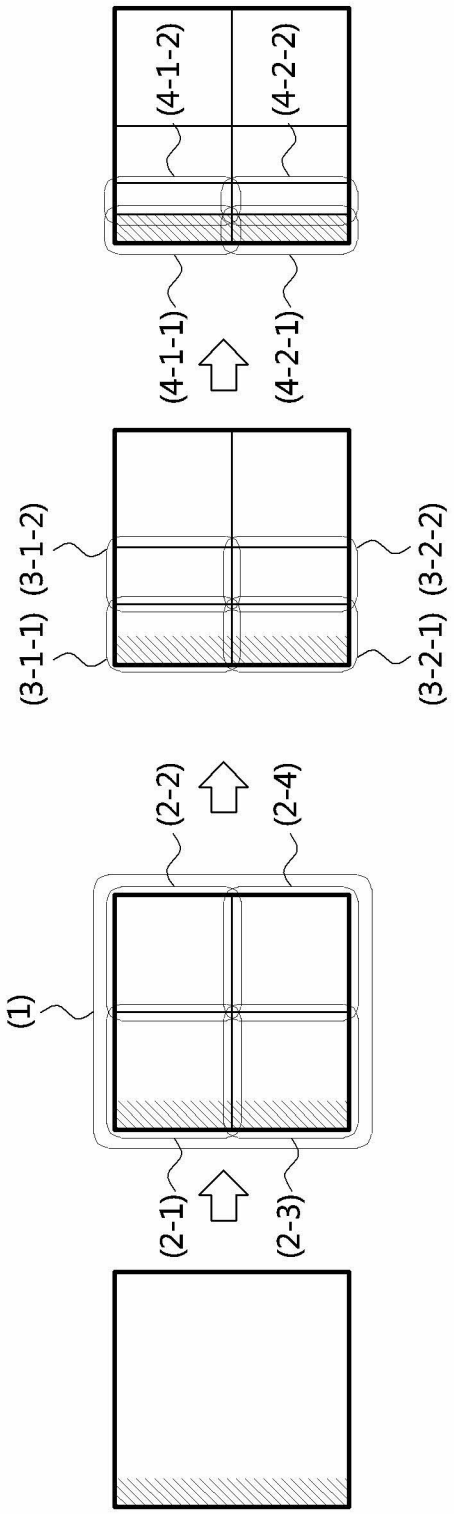


FIG. 17A

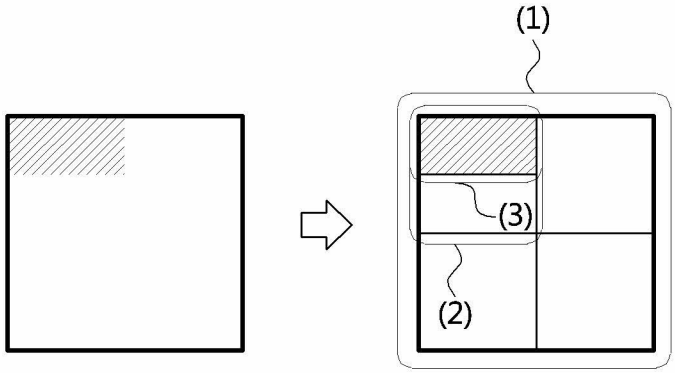


FIG. 17B

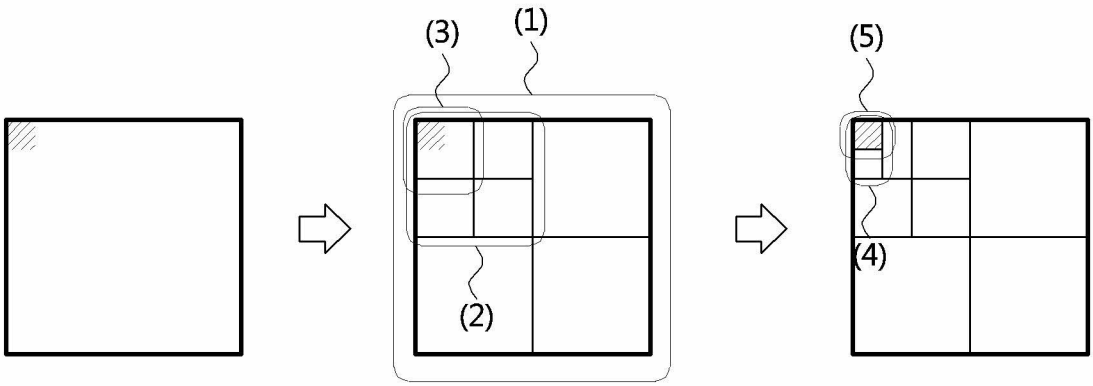


FIG. 17C

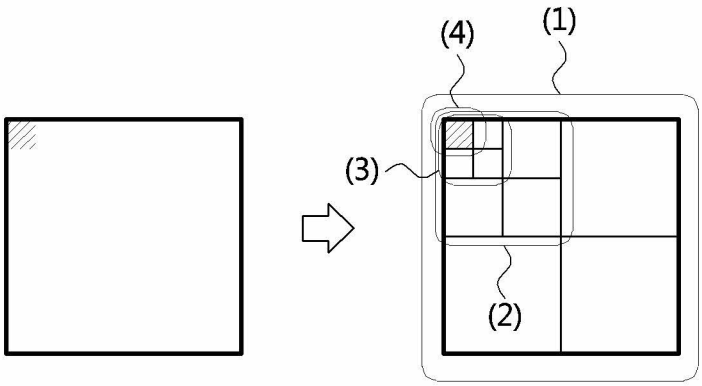


FIG. 17D

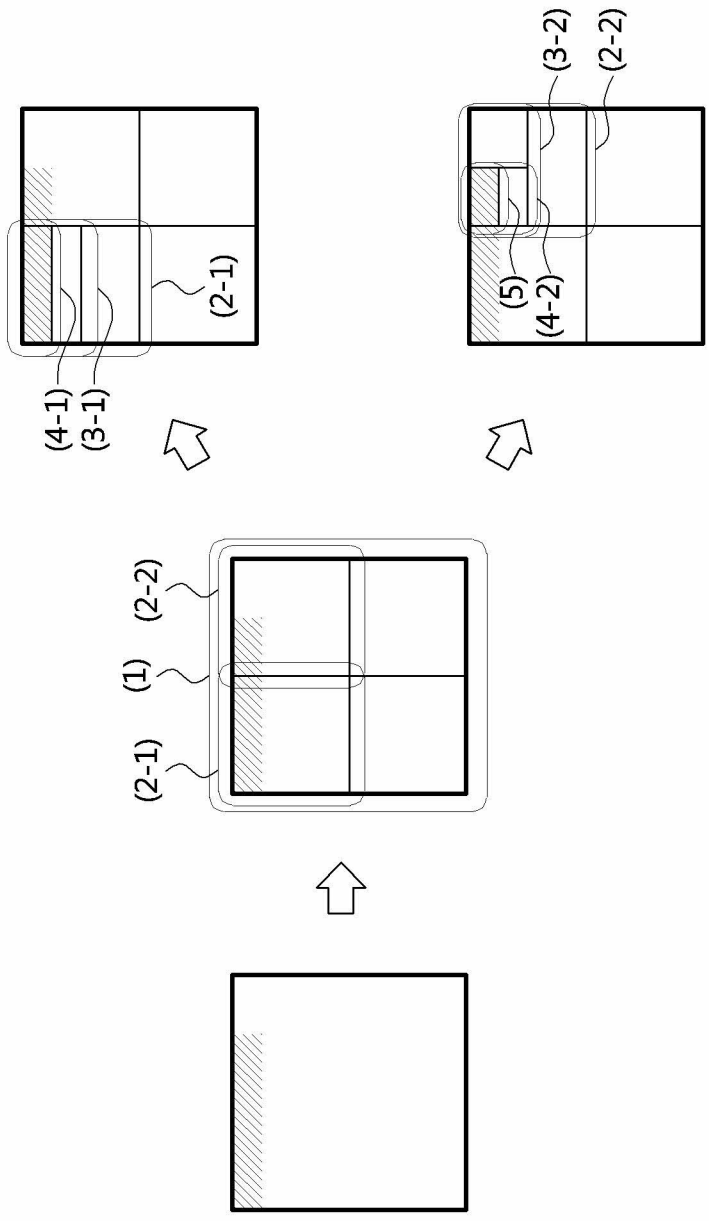


FIG. 17E

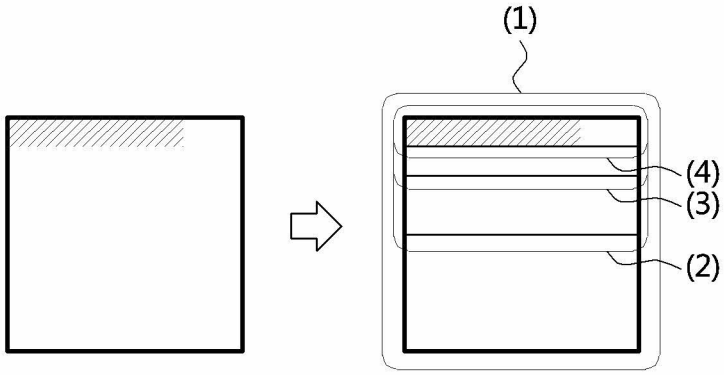


FIG. 17F

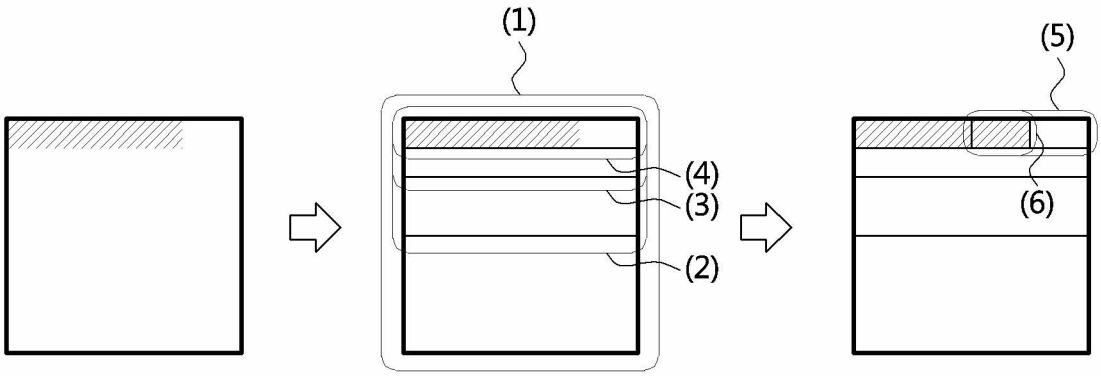


FIG. 18A

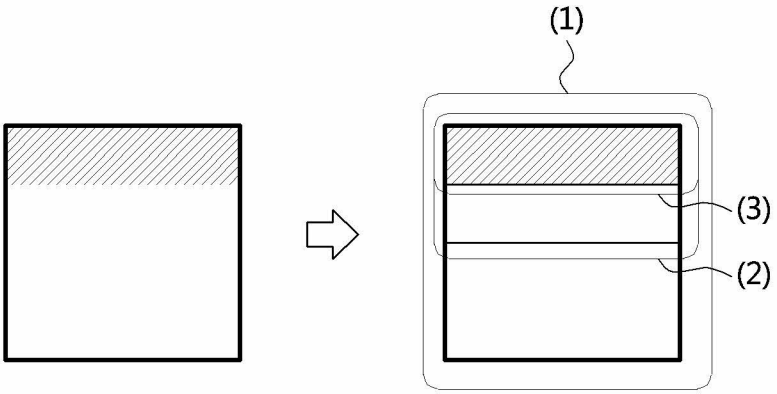


FIG. 18B

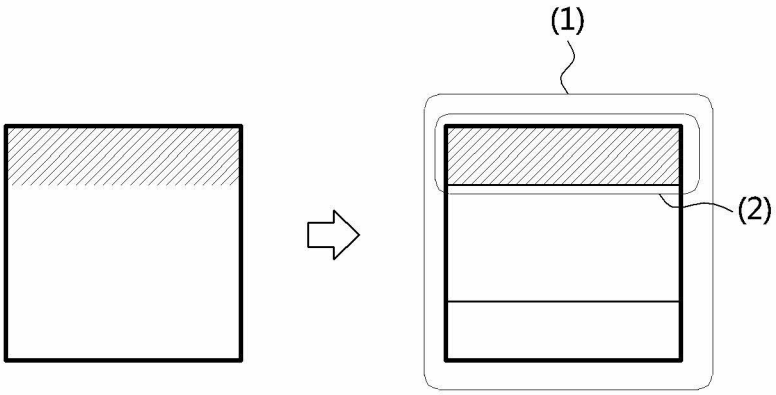


FIG. 18C

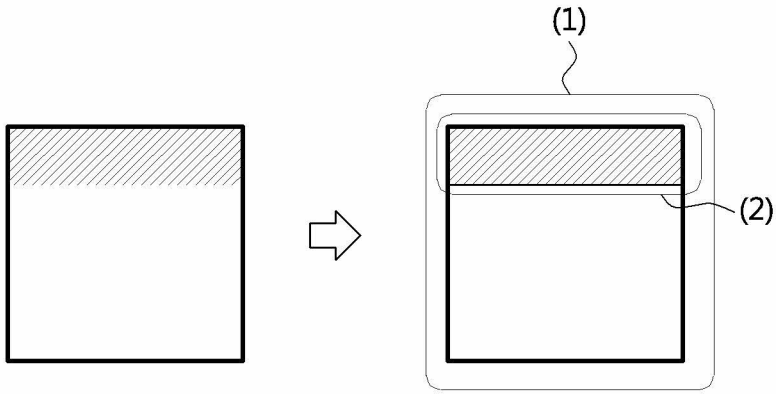
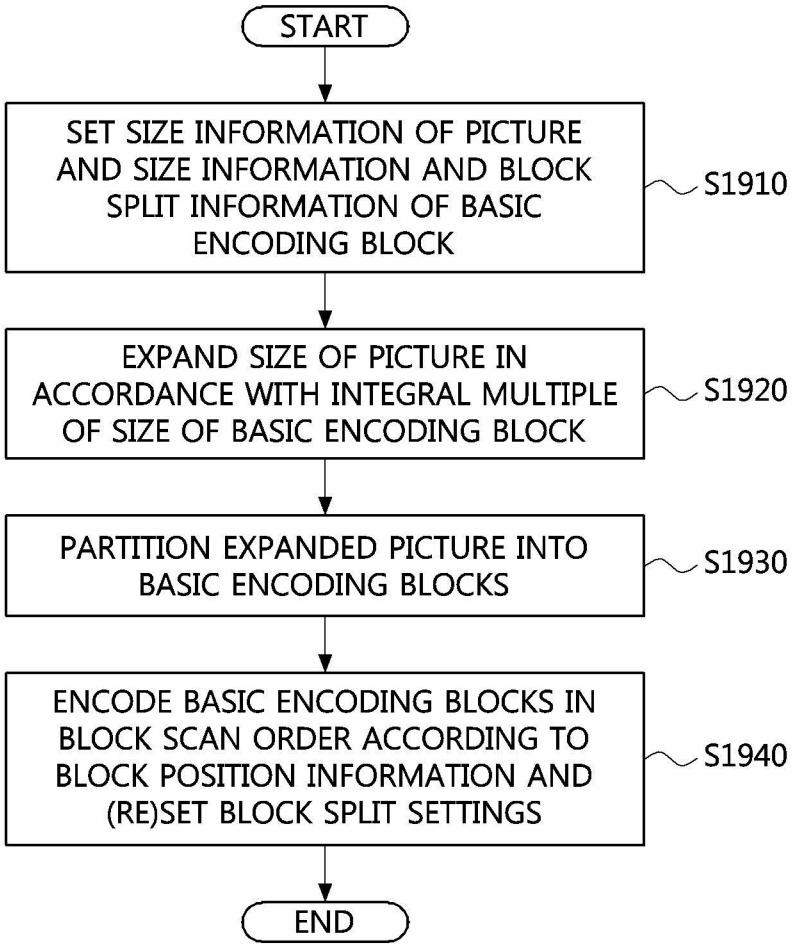


FIG. 19


START
SET SIZE INFORMATION OF PICTURE AND SIZE INFORMATION AND BLOCK SPLIT INFORMATION OF BASIC ENCODING BLOCK
S1910
EXPAND SIZE OF PICTURE IN ACCORDANCE WITH INTEGRAL MULTIPLE OF SIZE OF BASIC ENCODING BLOCK
S1920
PARTITION EXPANDED PICTURE INTO BASIC ENCODING BLOCKS
S1930
ENCODE BASIC ENCODING BLOCKS IN BLOCK SCAN ORDER ACCORDING TO BLOCK POSITION INFORMATION AND (RE)SET BLOCK SPLIT SETTINGS
S1940
END