

FIG. 1

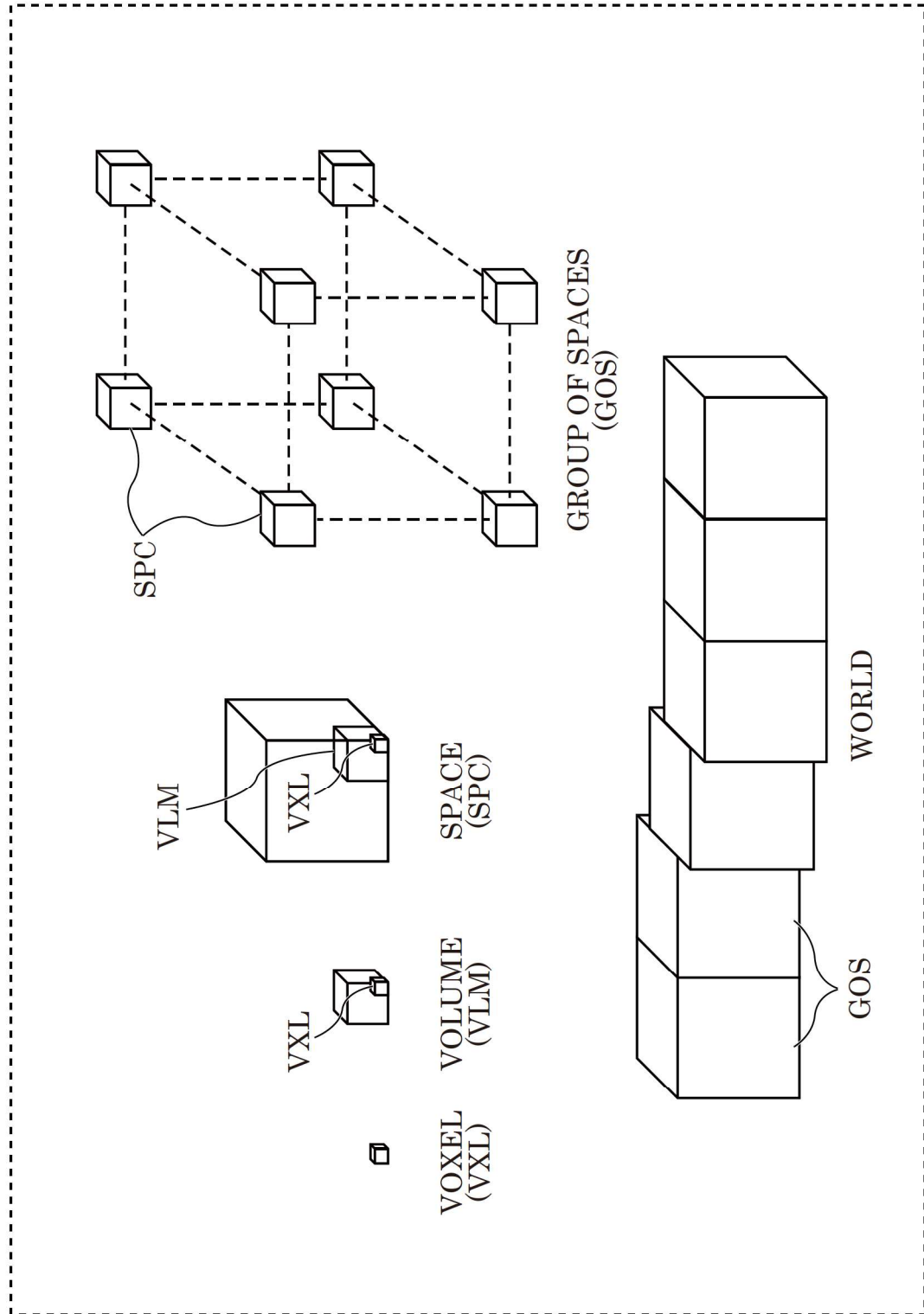


FIG. 2

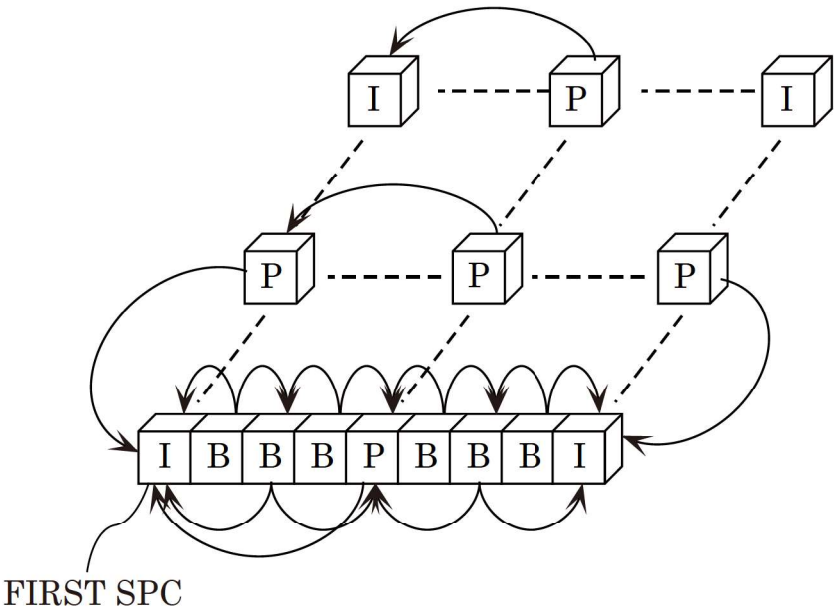


FIG. 3

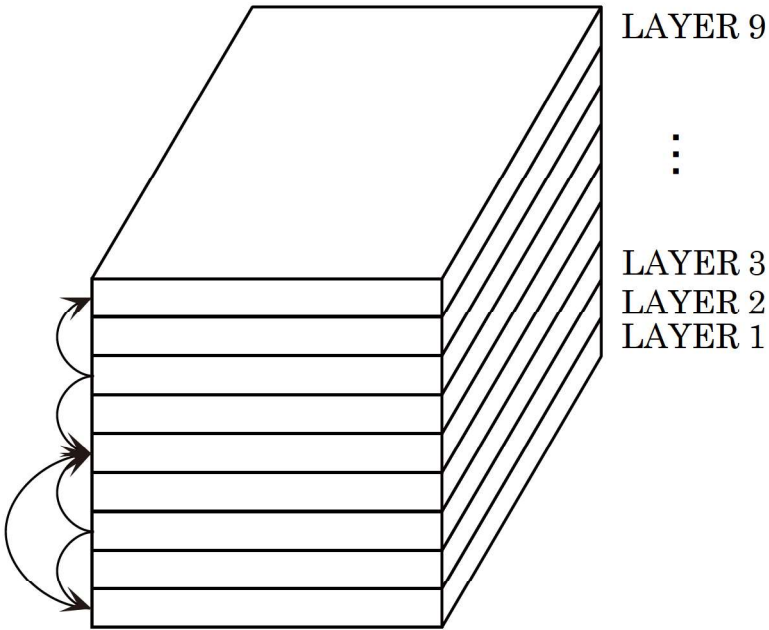


FIG. 4

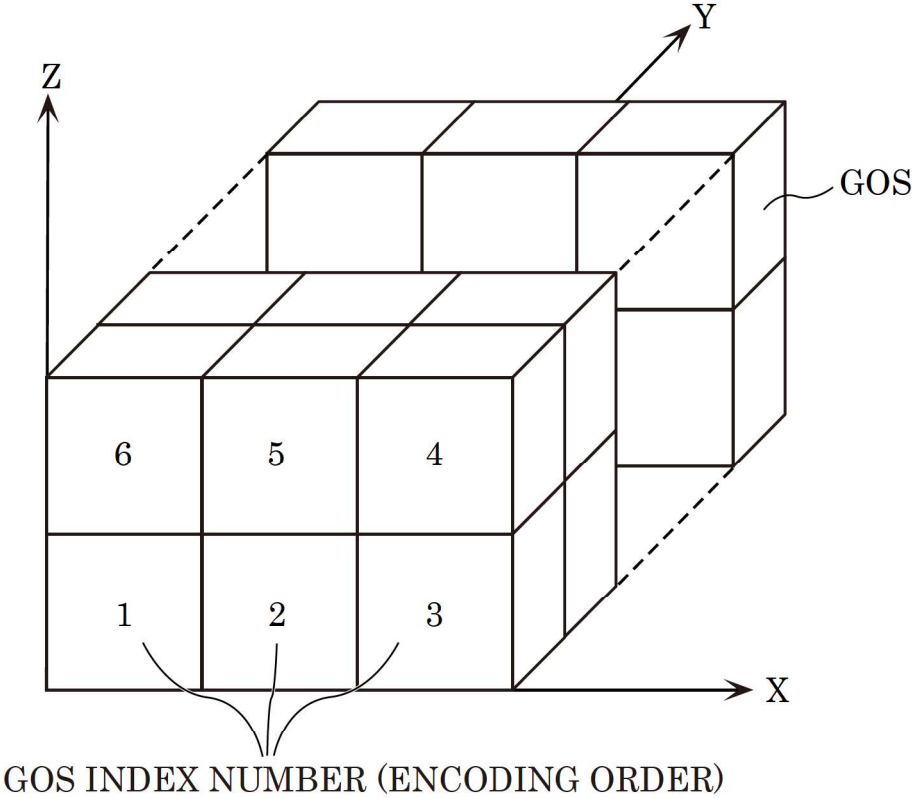


FIG. 5

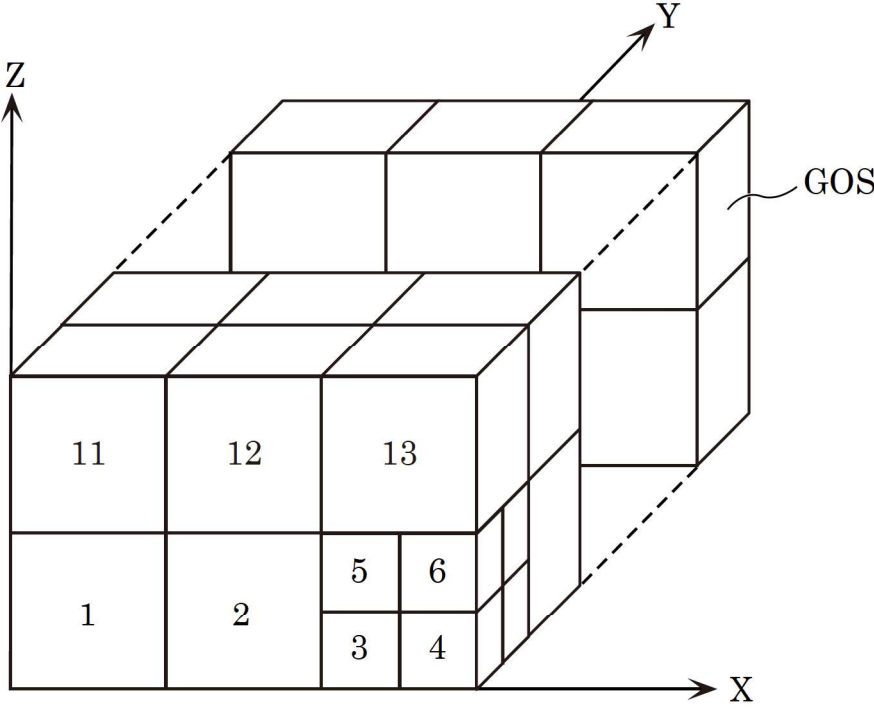


FIG. 6

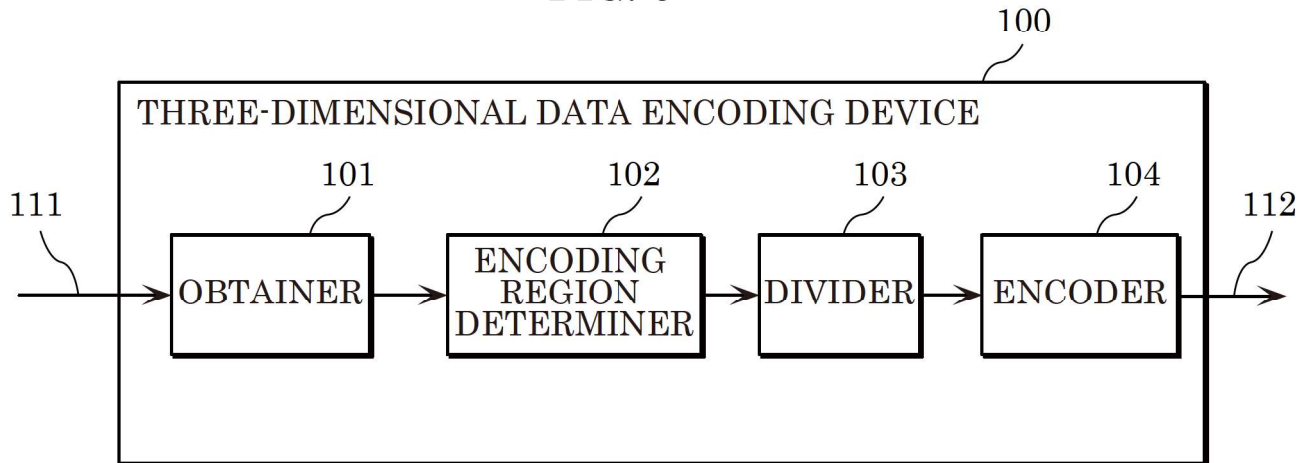


FIG. 7

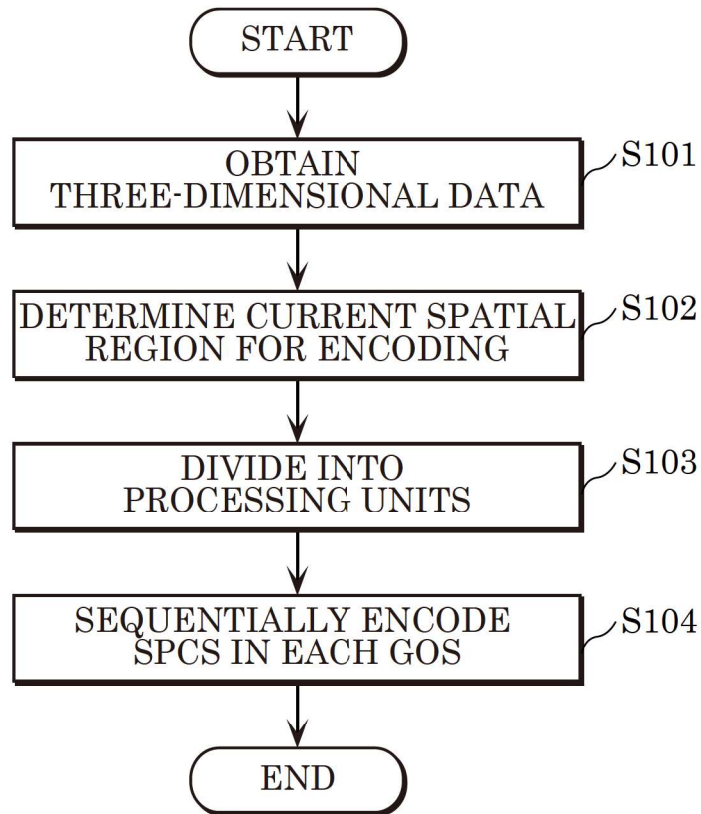


FIG. 8

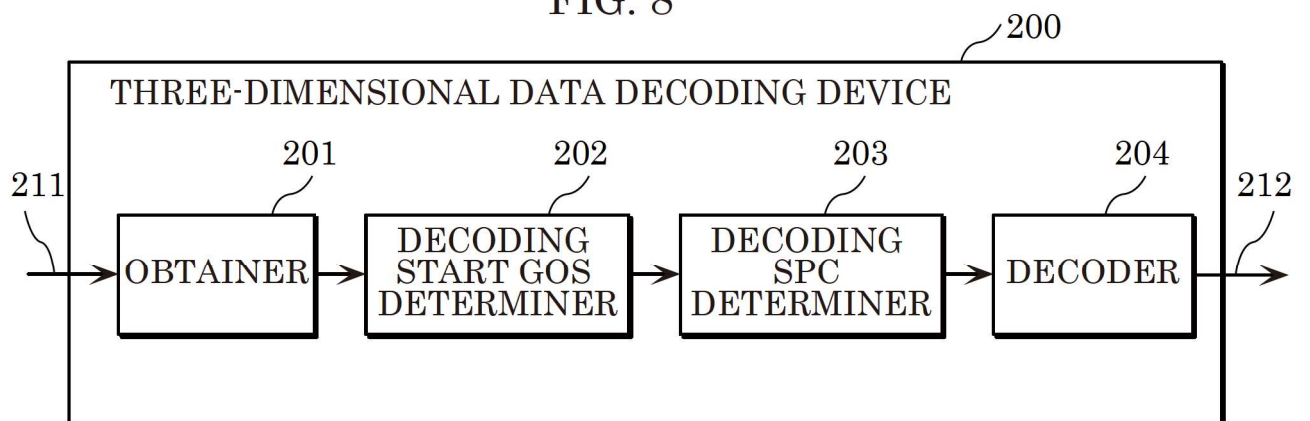


FIG. 9

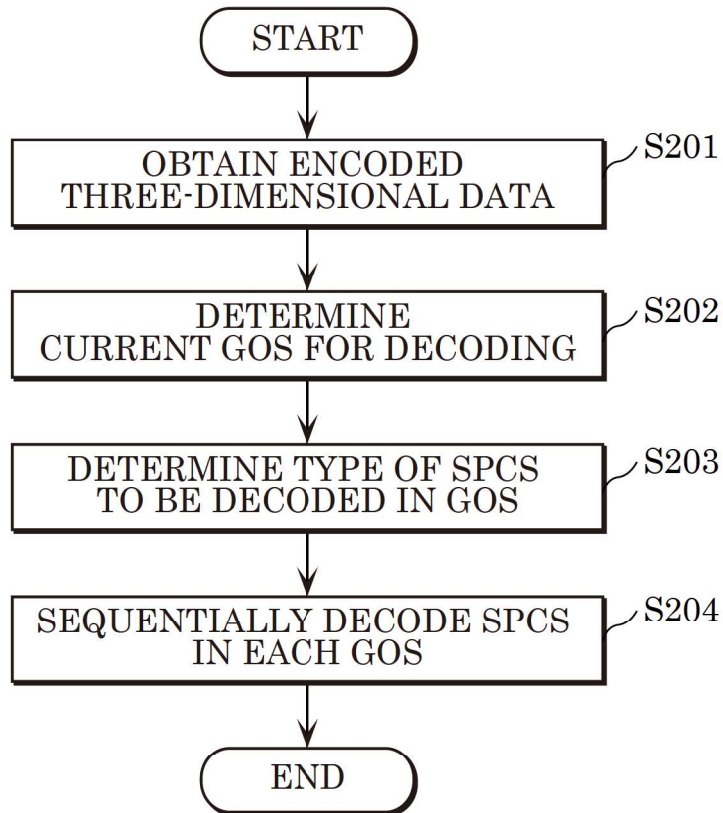


FIG. 10

OBJECT	GOS NUMBER	COORDINATES	GOS NUMBER
object(1)	1, 2	(x1, y1, z1)	1
object(2)	5	(x2, y2, z2)	2
object(3)	8, 9, 10	(x3, y3, z3)	3
...	...	...	...
object(N)	101, 113, 125	(xN, yN, zN)	N

OBJECT-GOS TABLE

COORDINATES-GOS TABLE

TIME	GOS NUMBER	GOS NUMBER	GOS ADDRESS
pts(1)	1	1	addr(1)
pts(2)	30	2	addr(2)
pts(3)	50	3	addr(3)
...	...	...	...
pts(N)	200	N	addr(N)

TIME-GOS TABLE

GOS-ADDRESS TABLE

FIG. 11

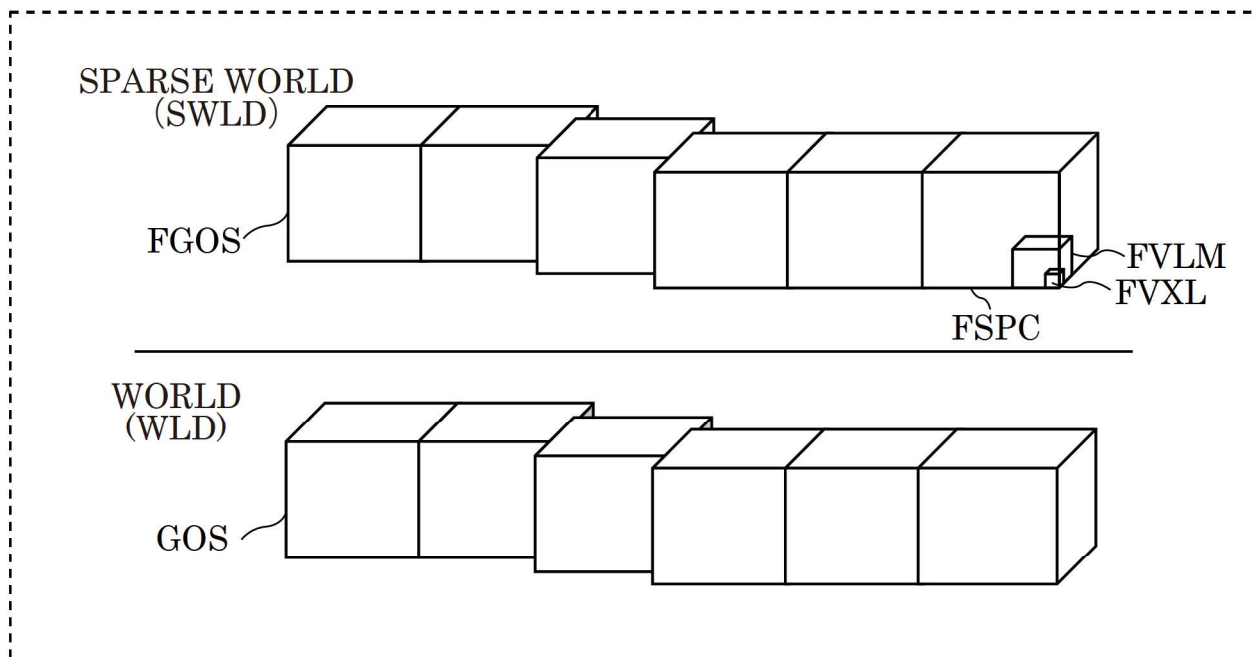


FIG. 12

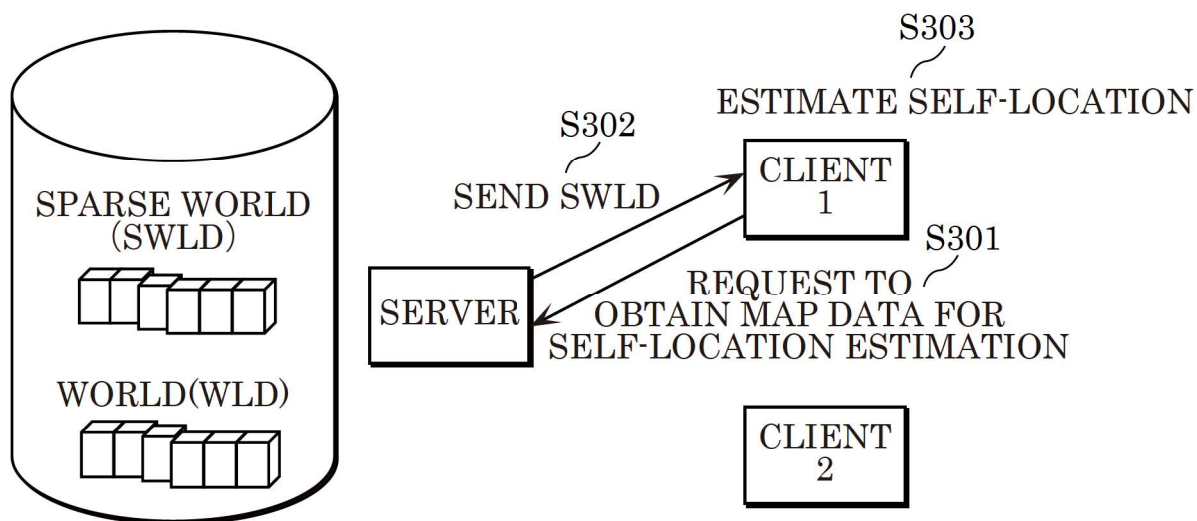


FIG. 13

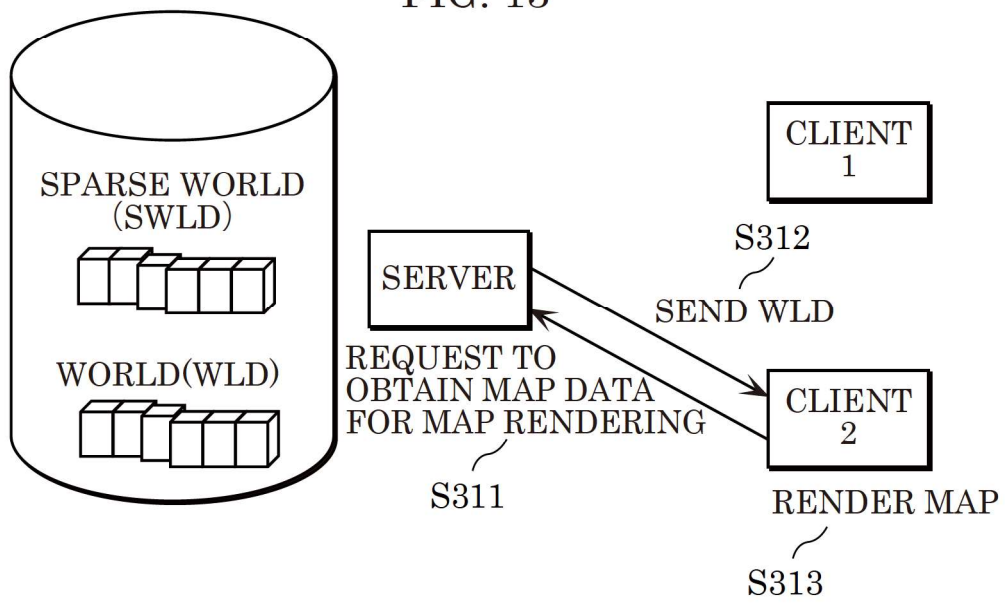


FIG. 14

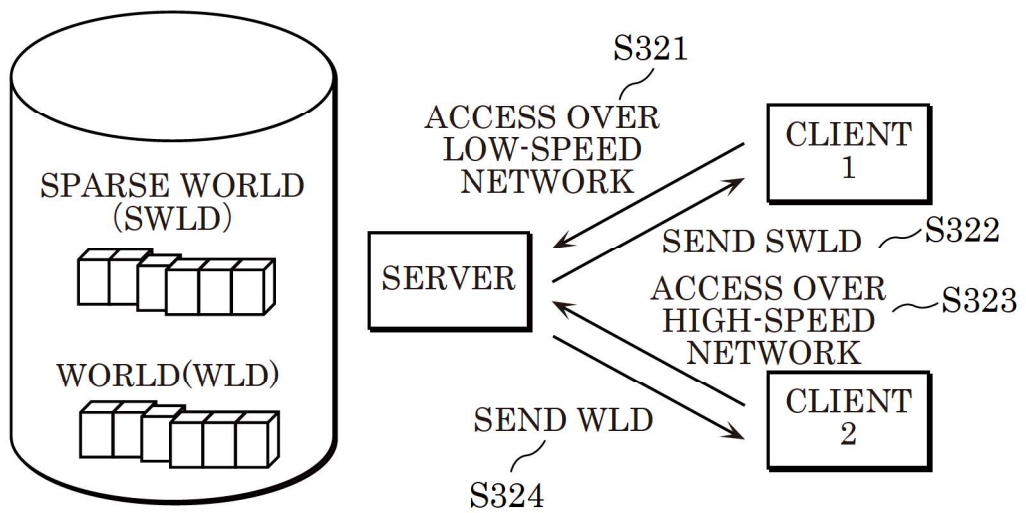


FIG. 15

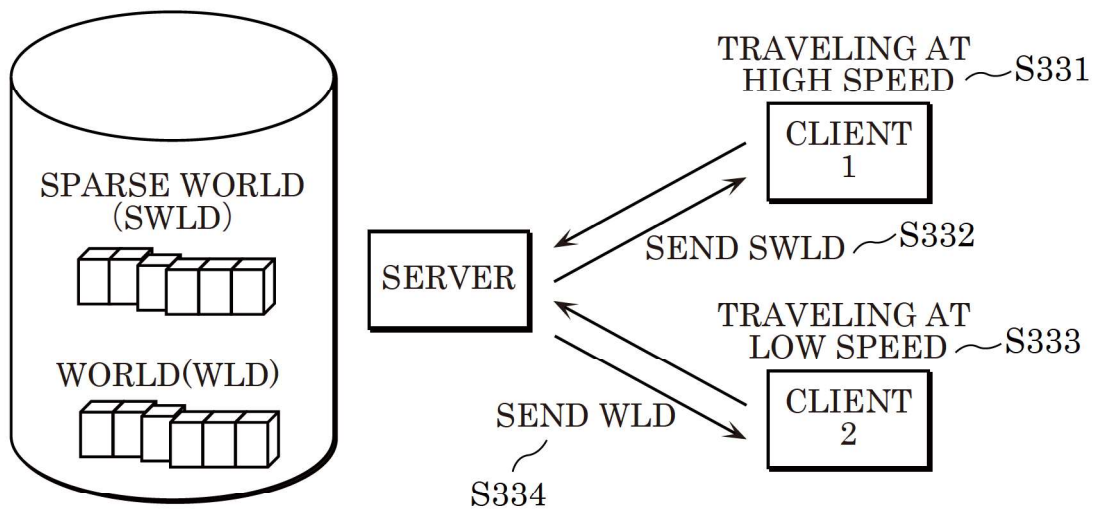


FIG. 16

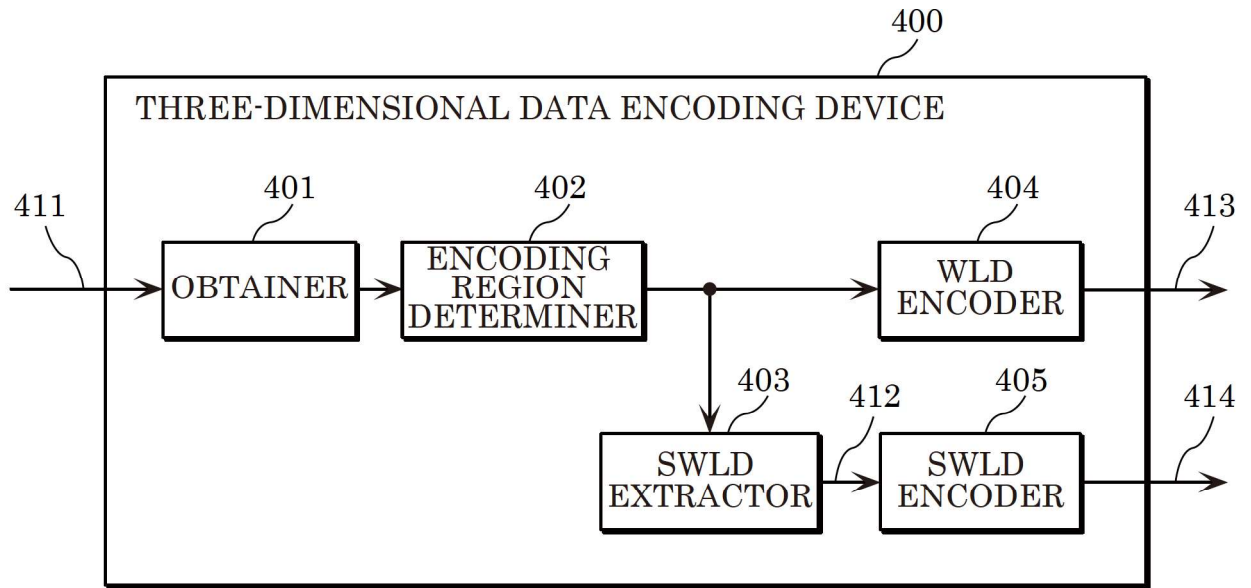


FIG. 17

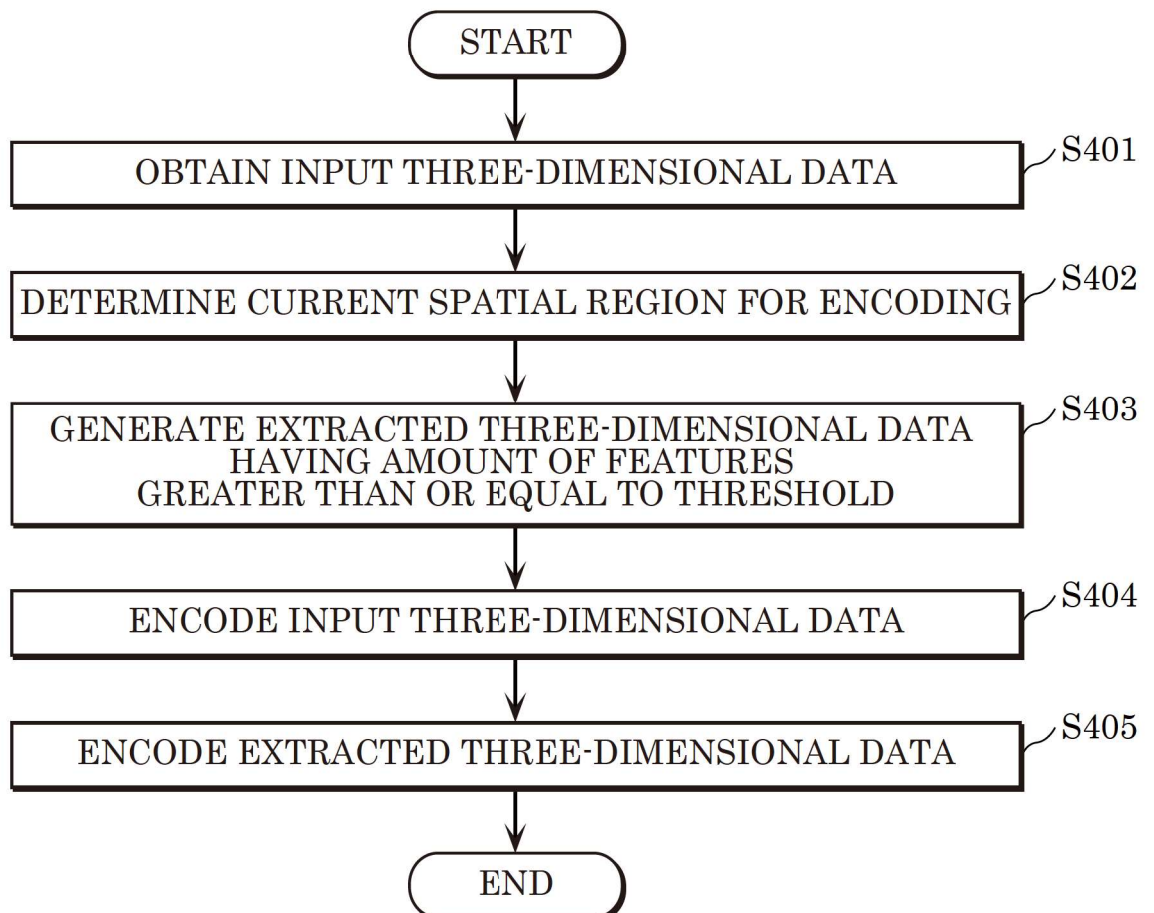


FIG. 18

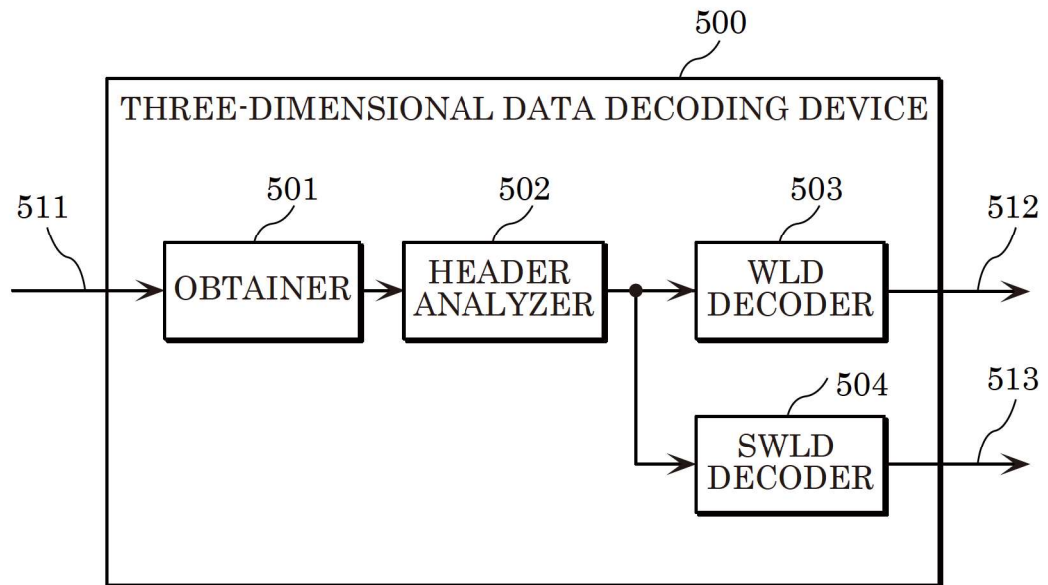


FIG. 19

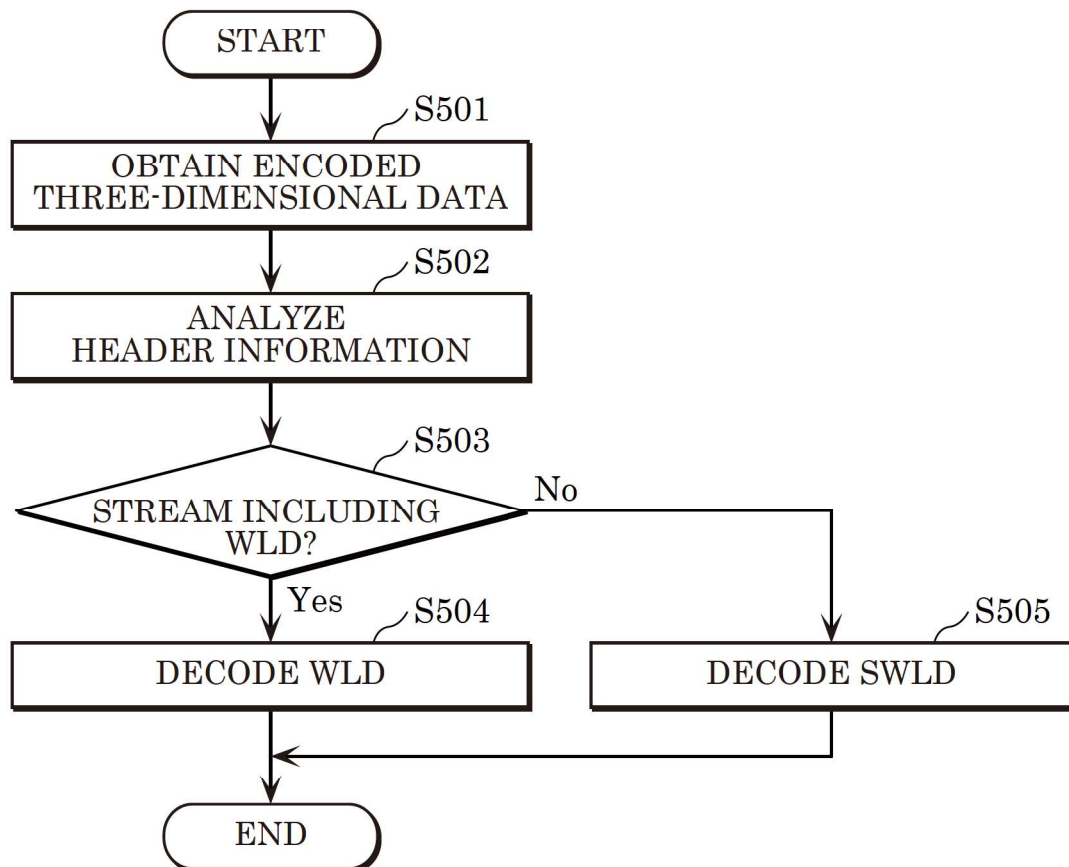


FIG. 20

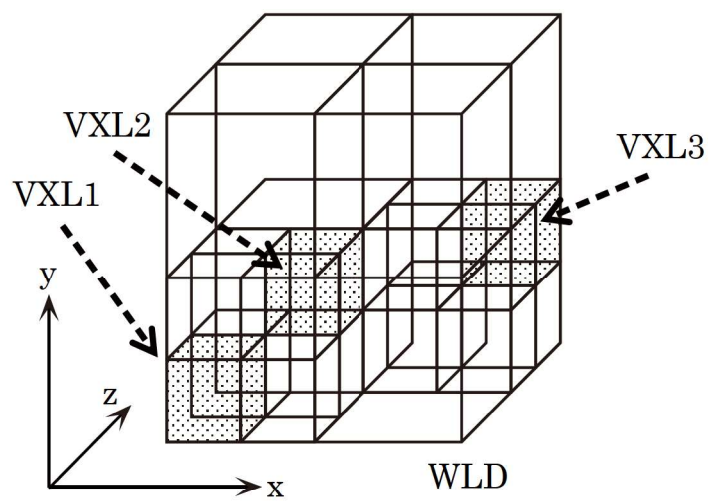


FIG. 21

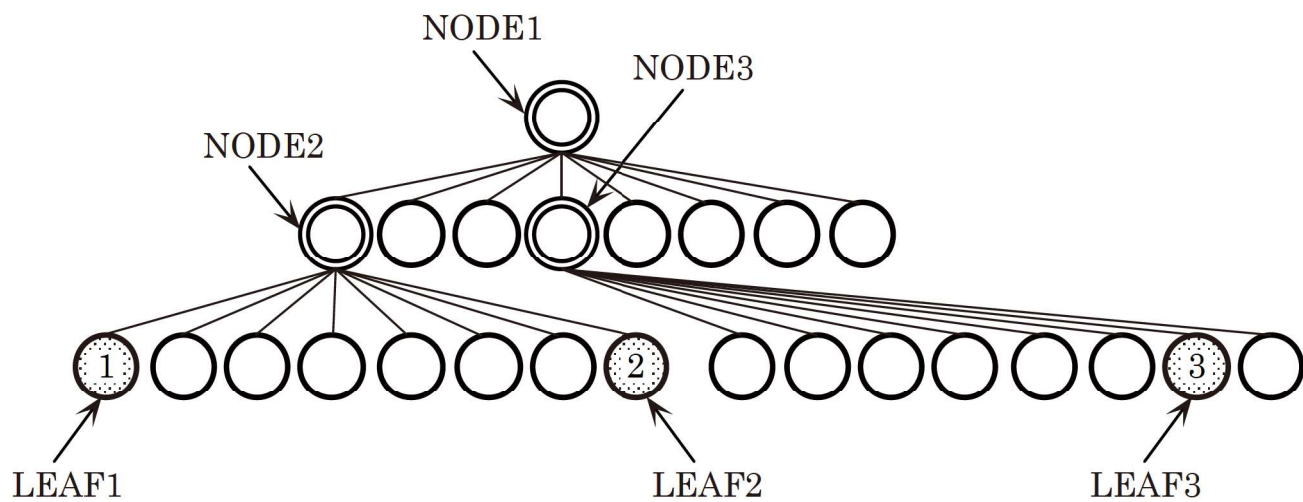


FIG. 22

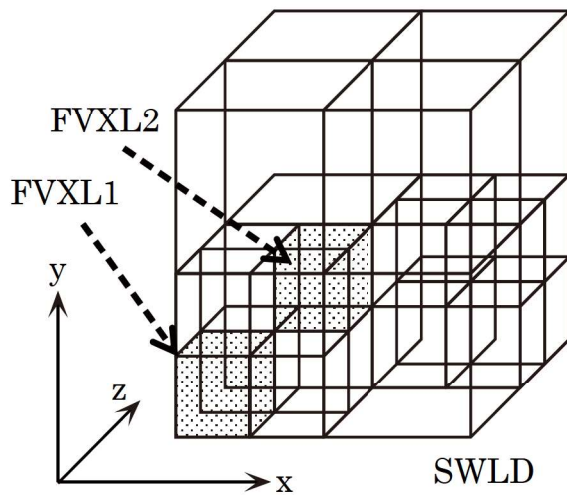


FIG. 23

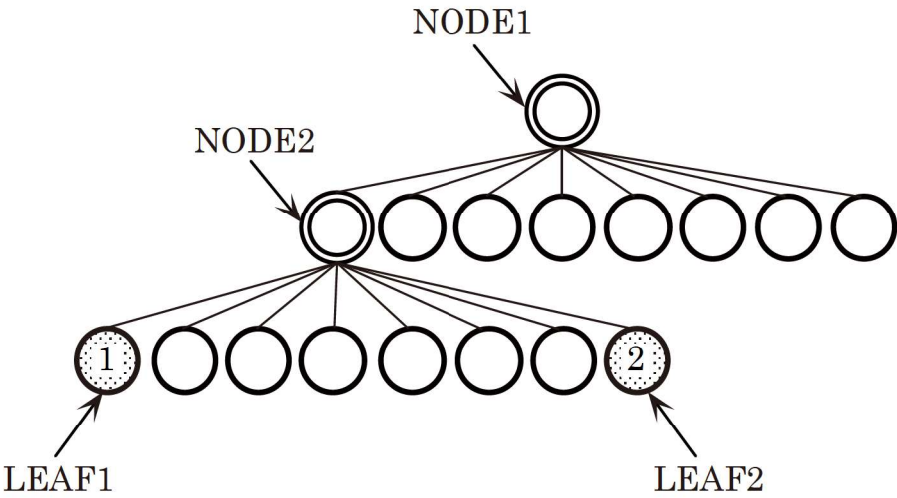


FIG. 24

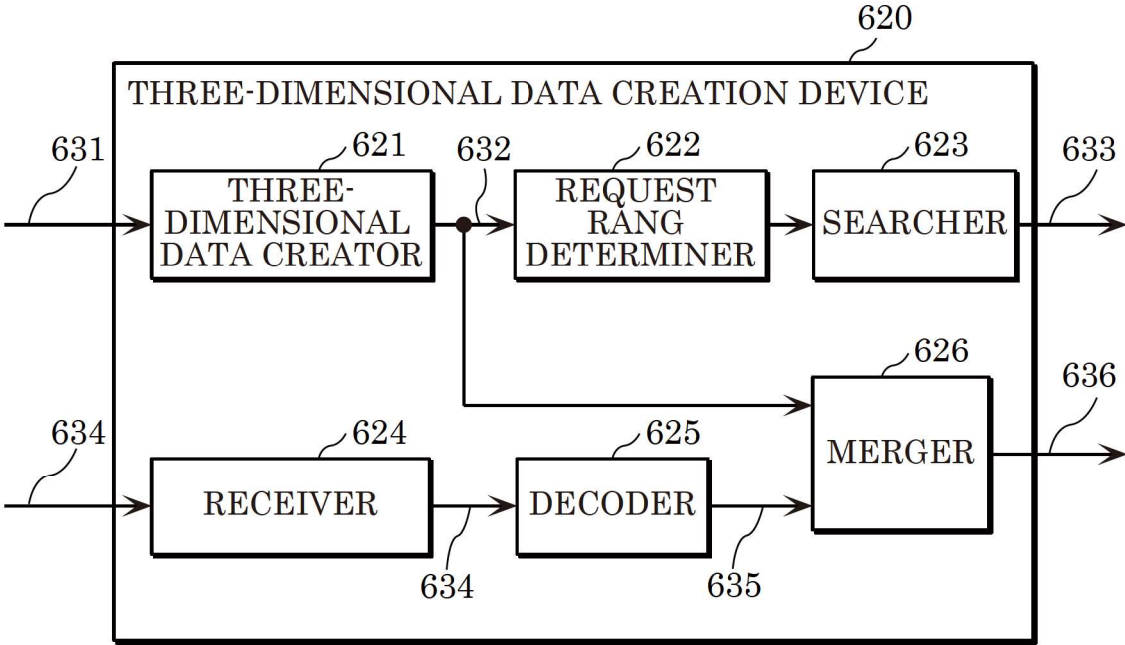


FIG. 25

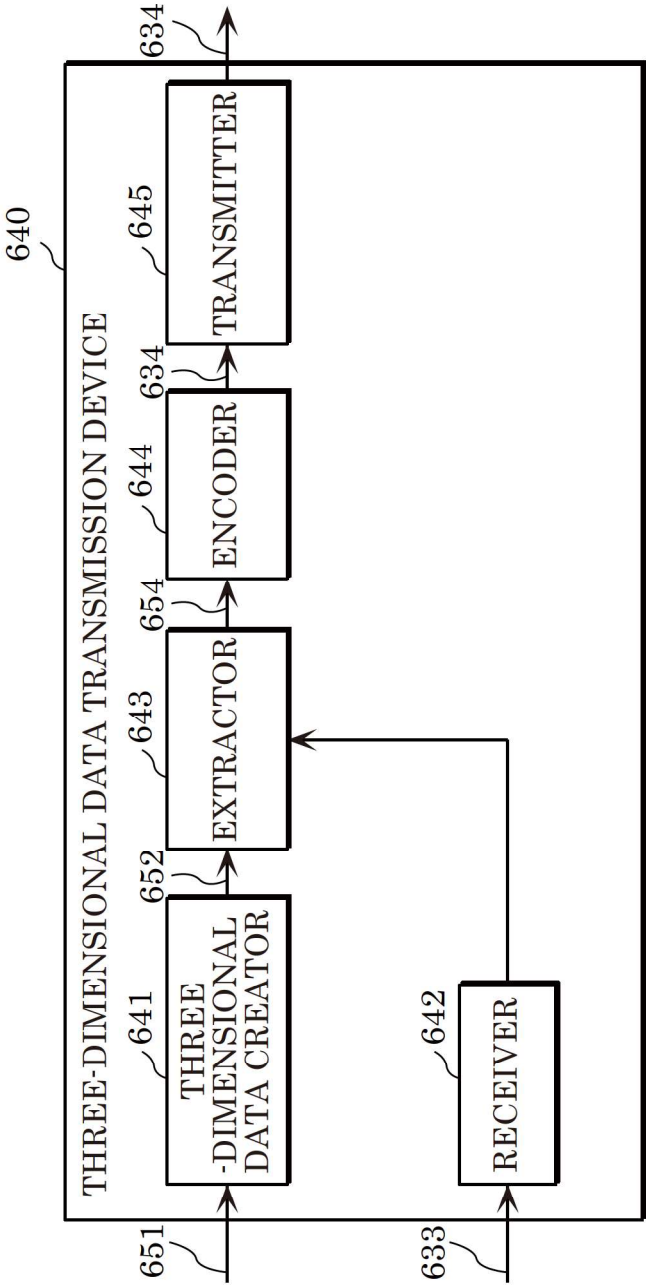


FIG. 26

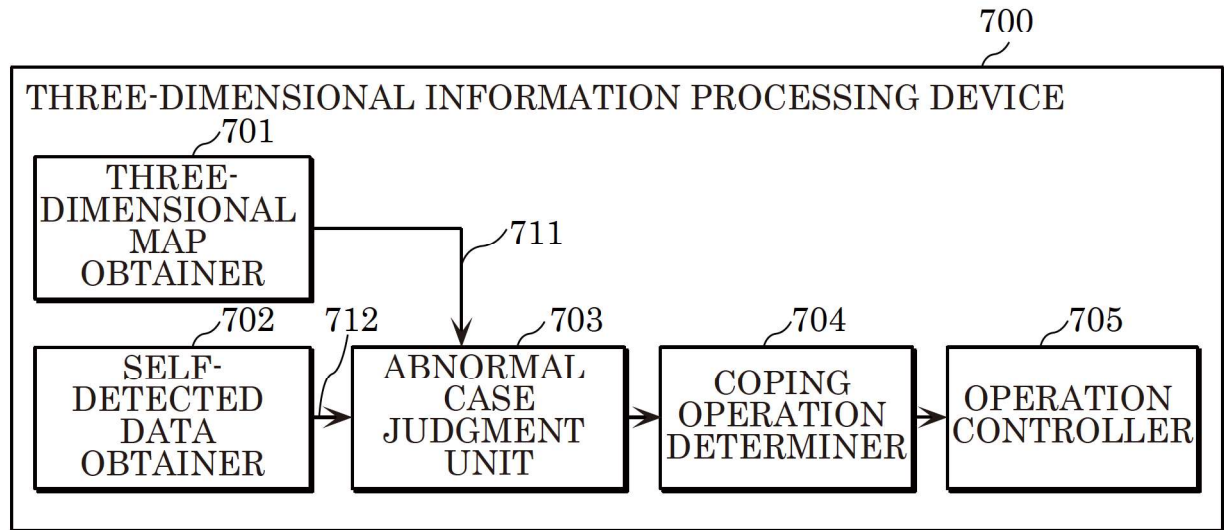


FIG. 27

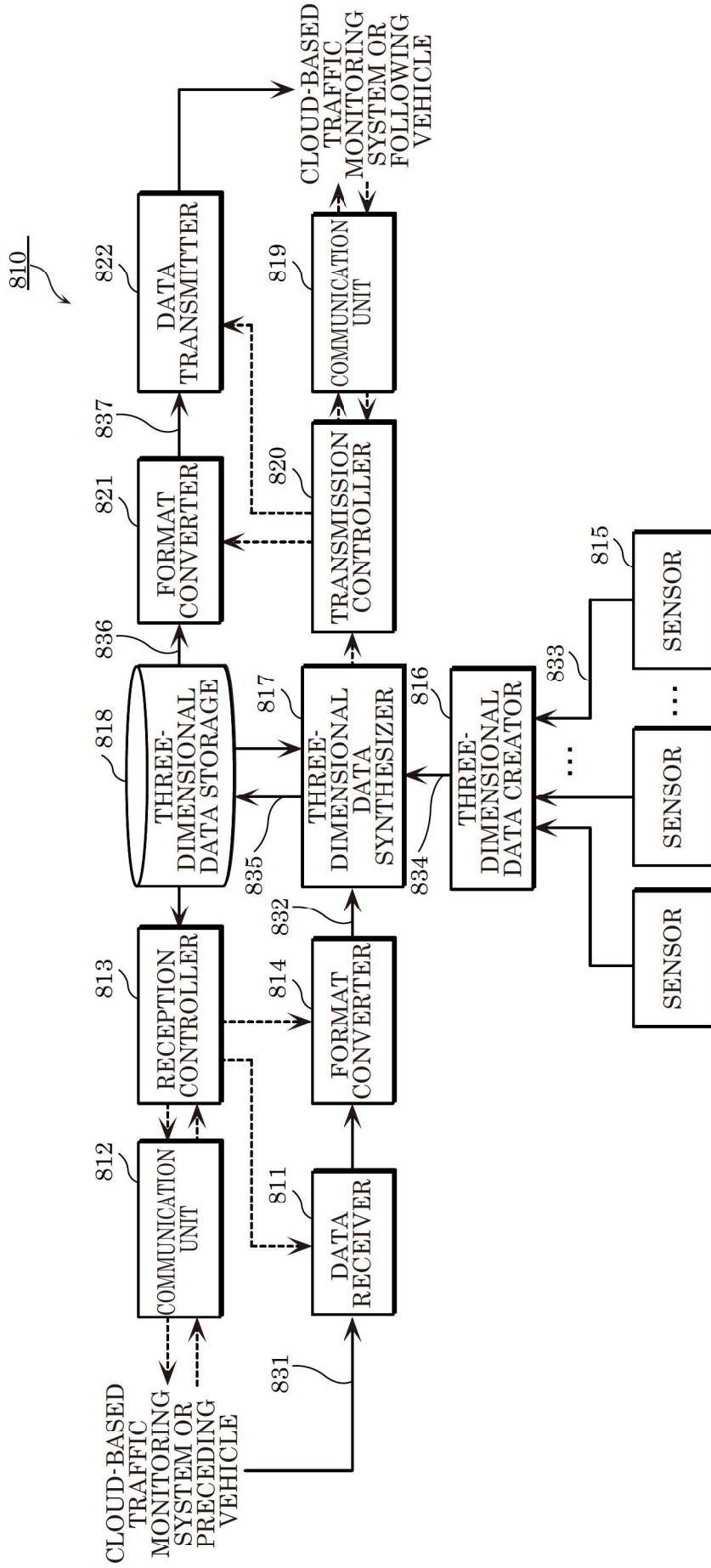


FIG. 28

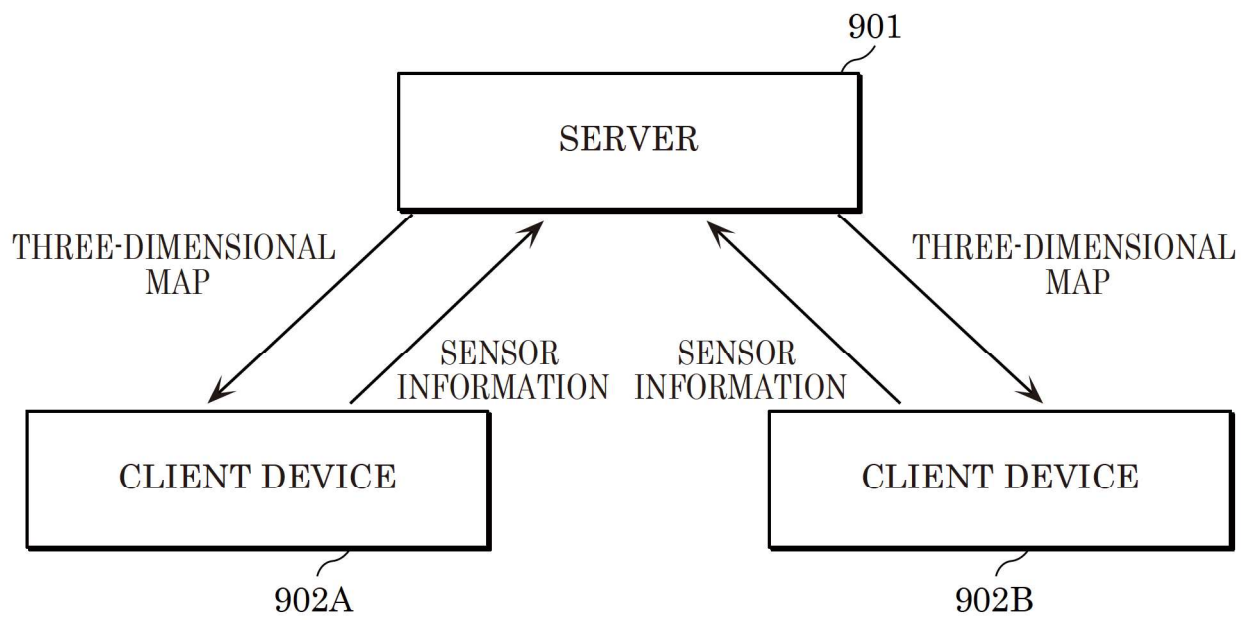


FIG. 29

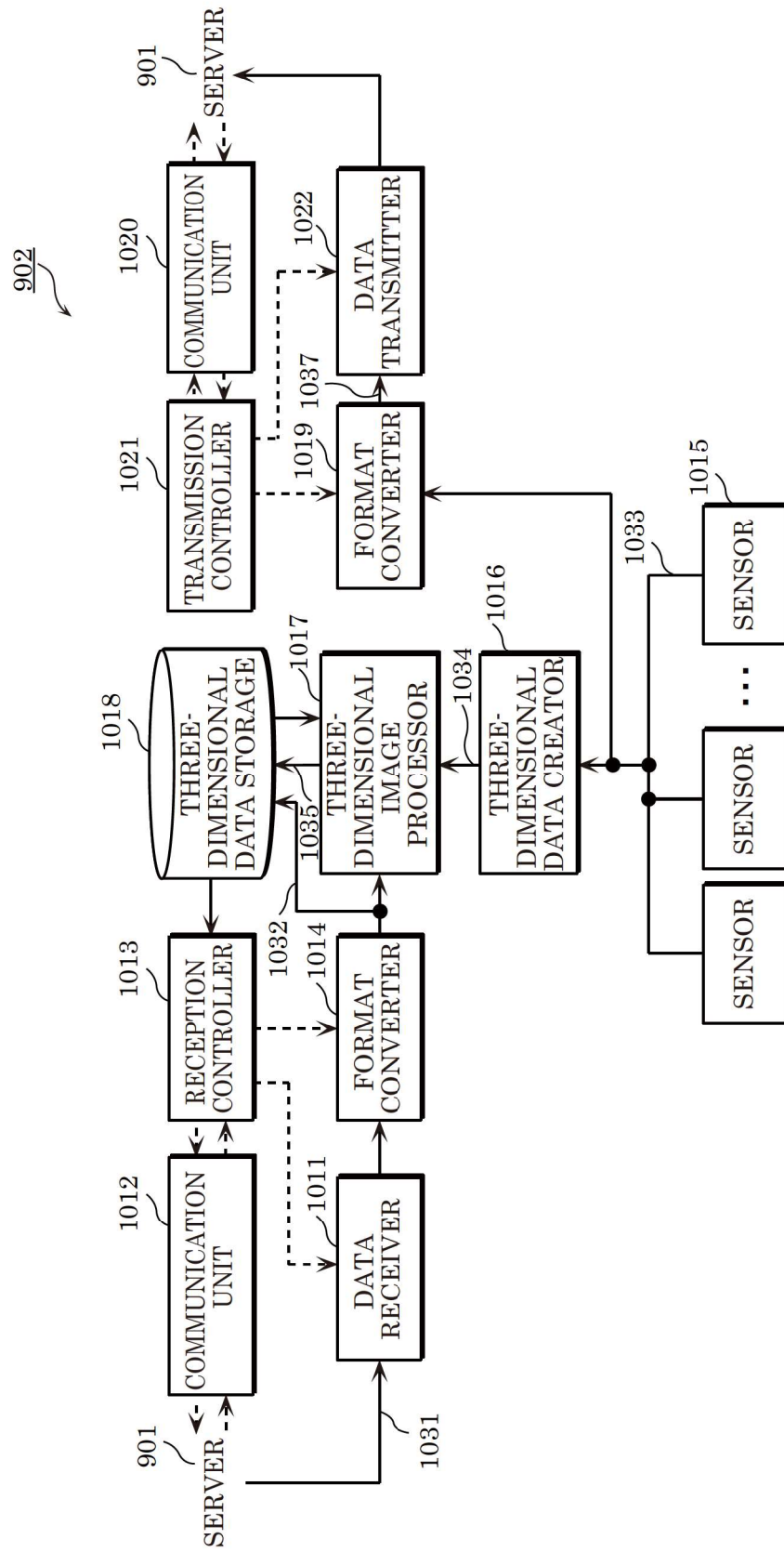


FIG. 30

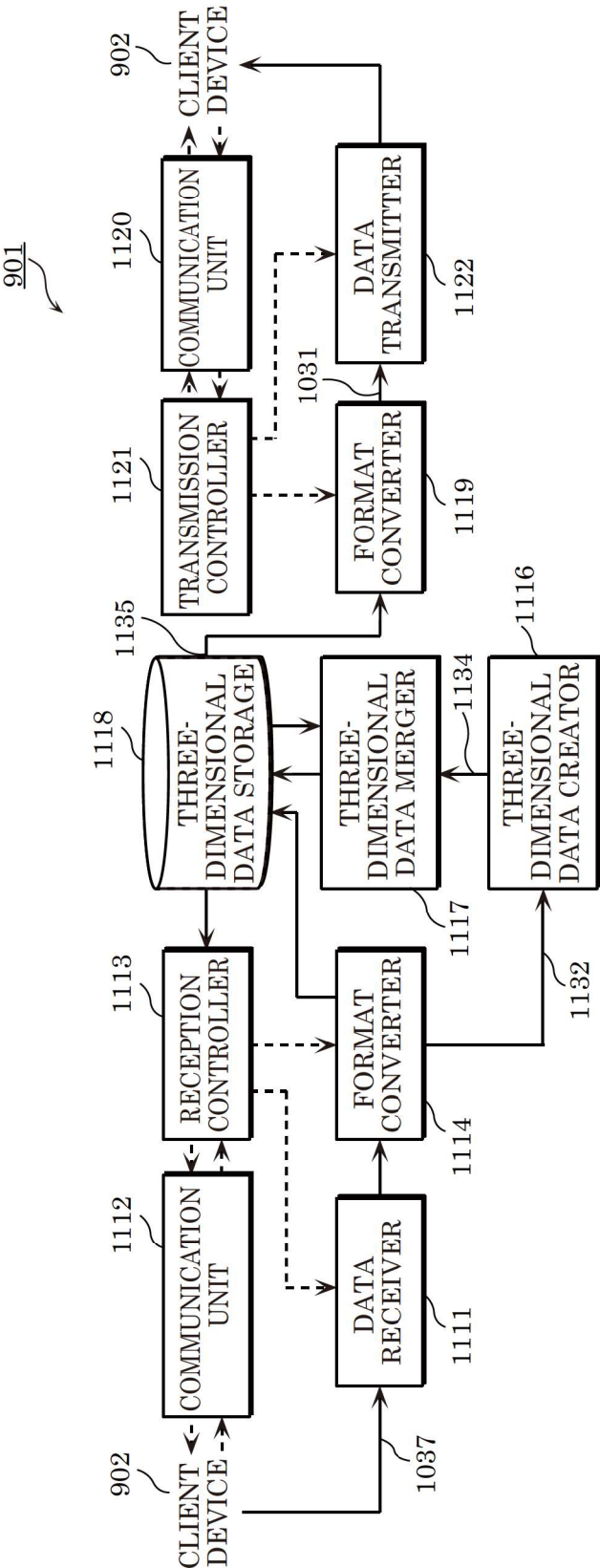


FIG. 31

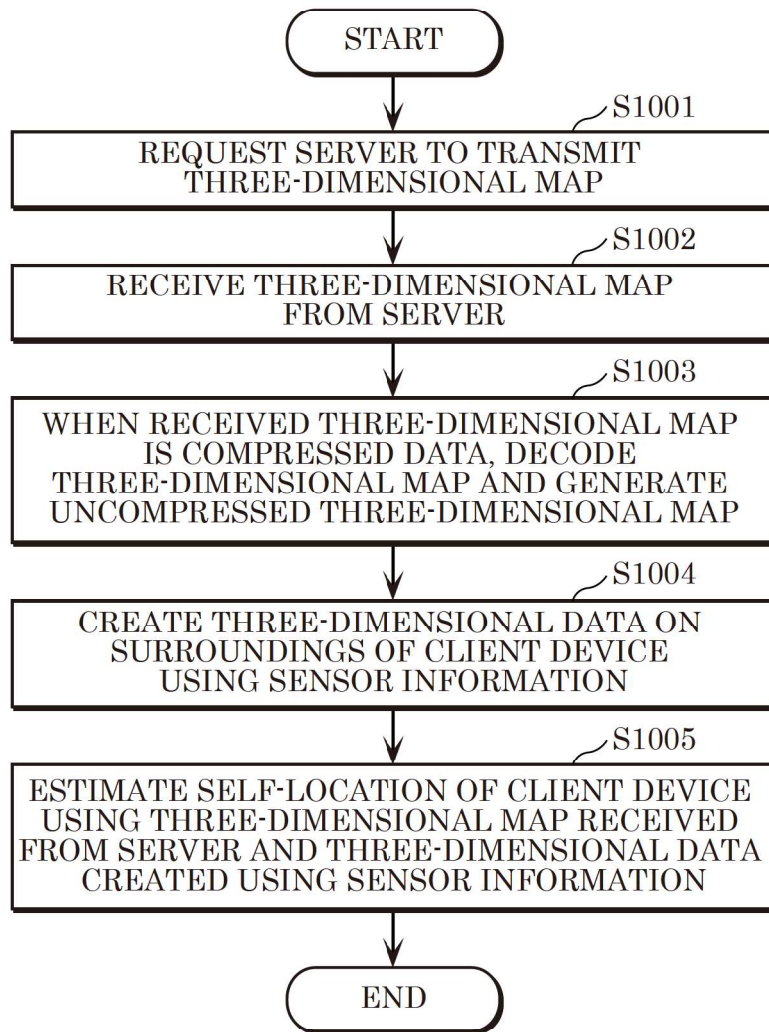


FIG. 32

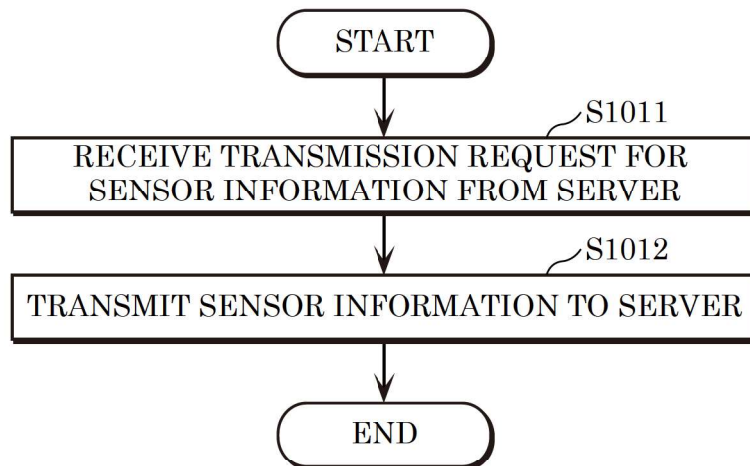


FIG. 33

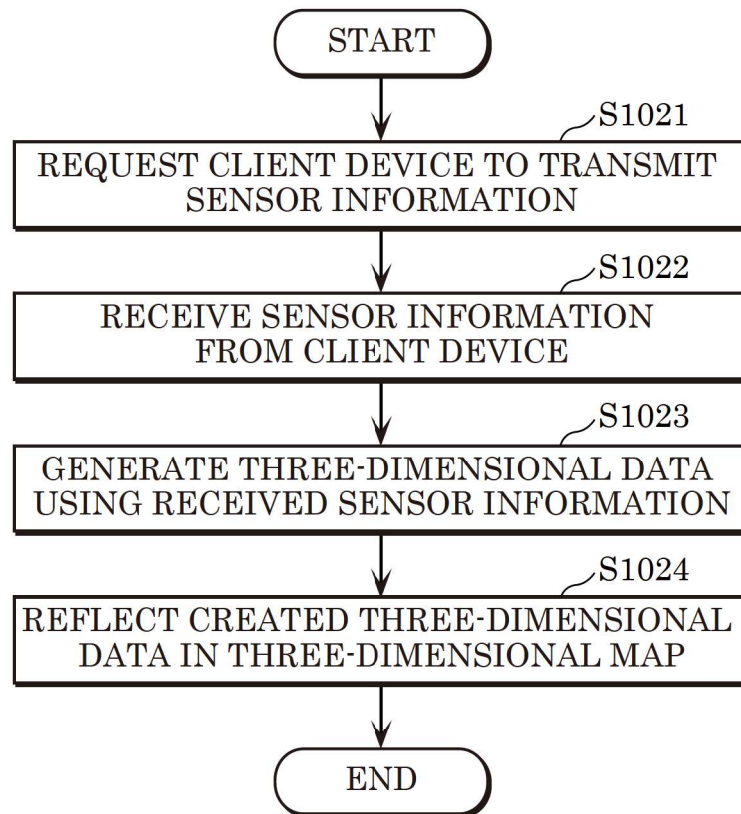


FIG. 34

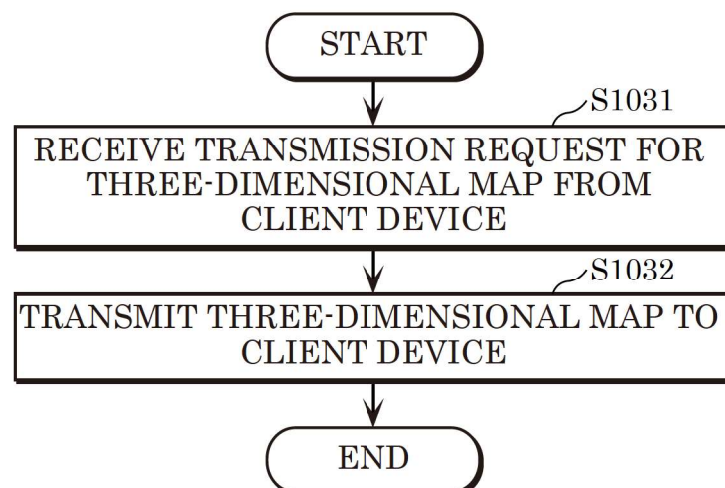


FIG. 35

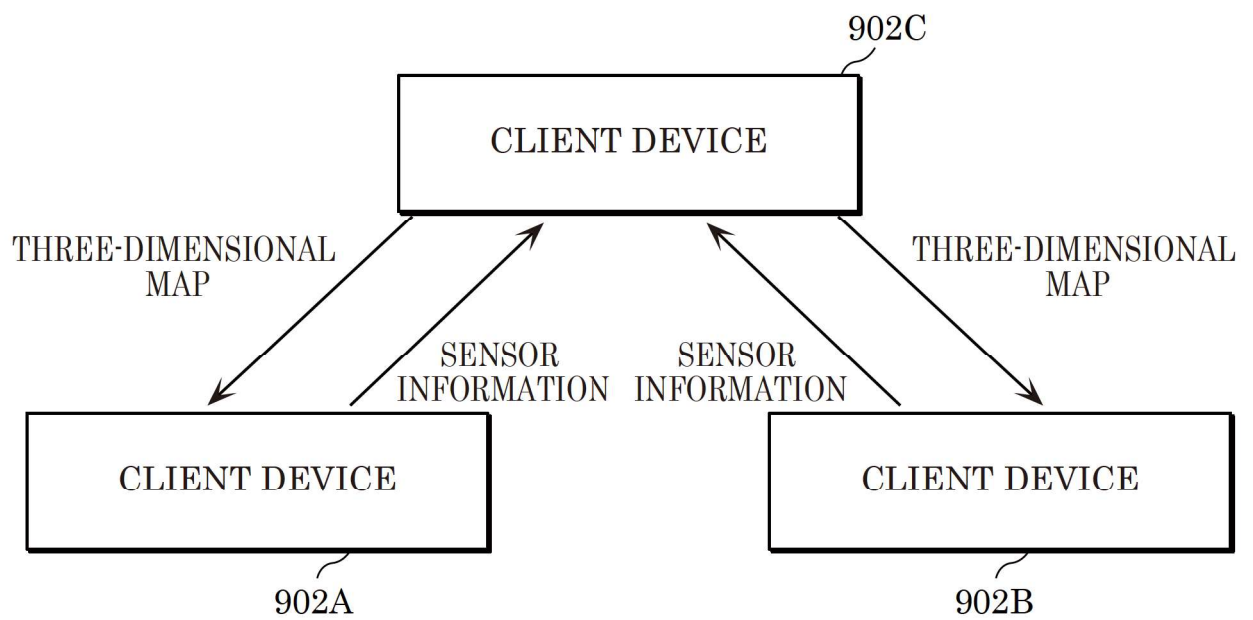


FIG. 36

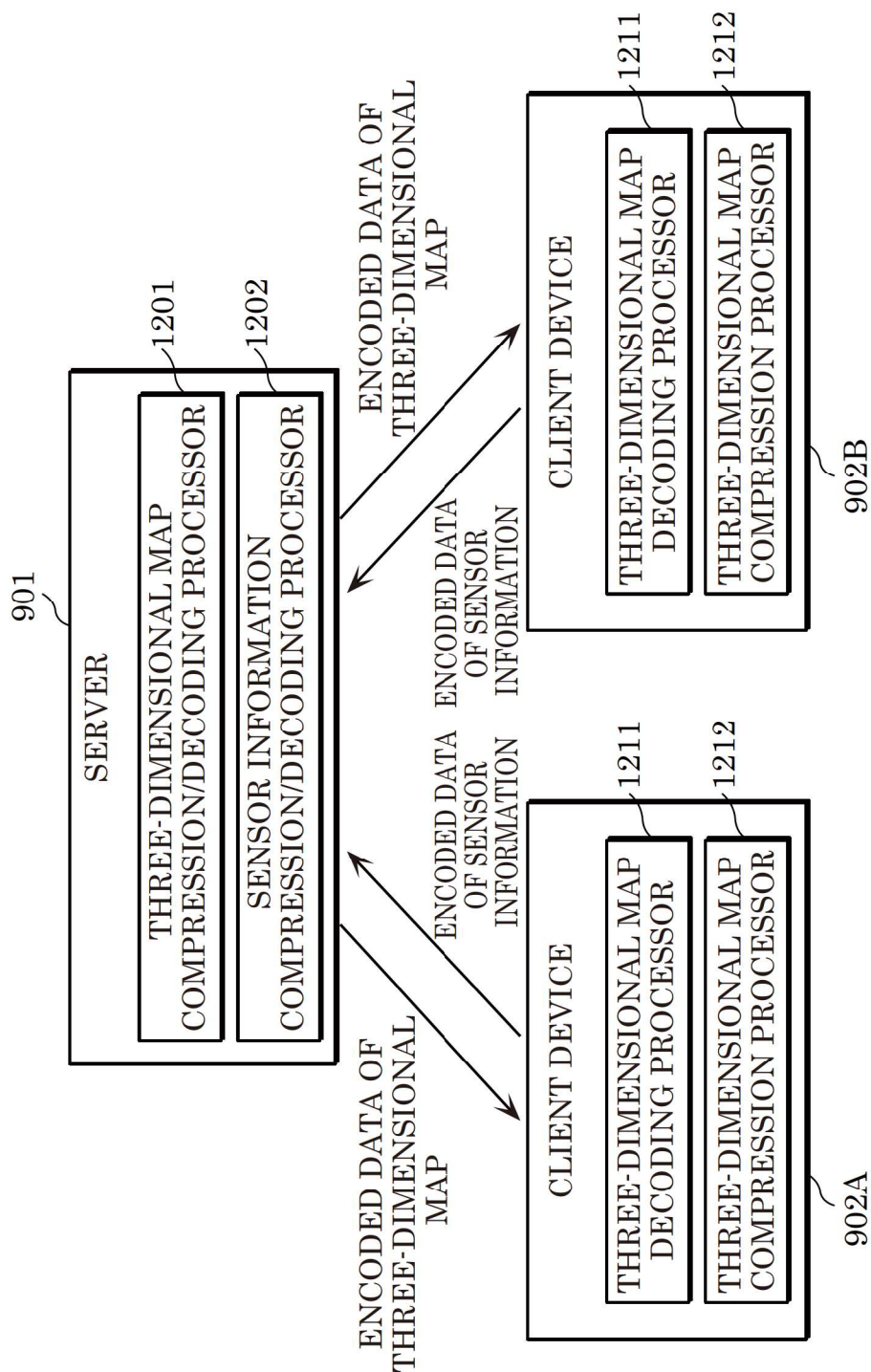


FIG. 37

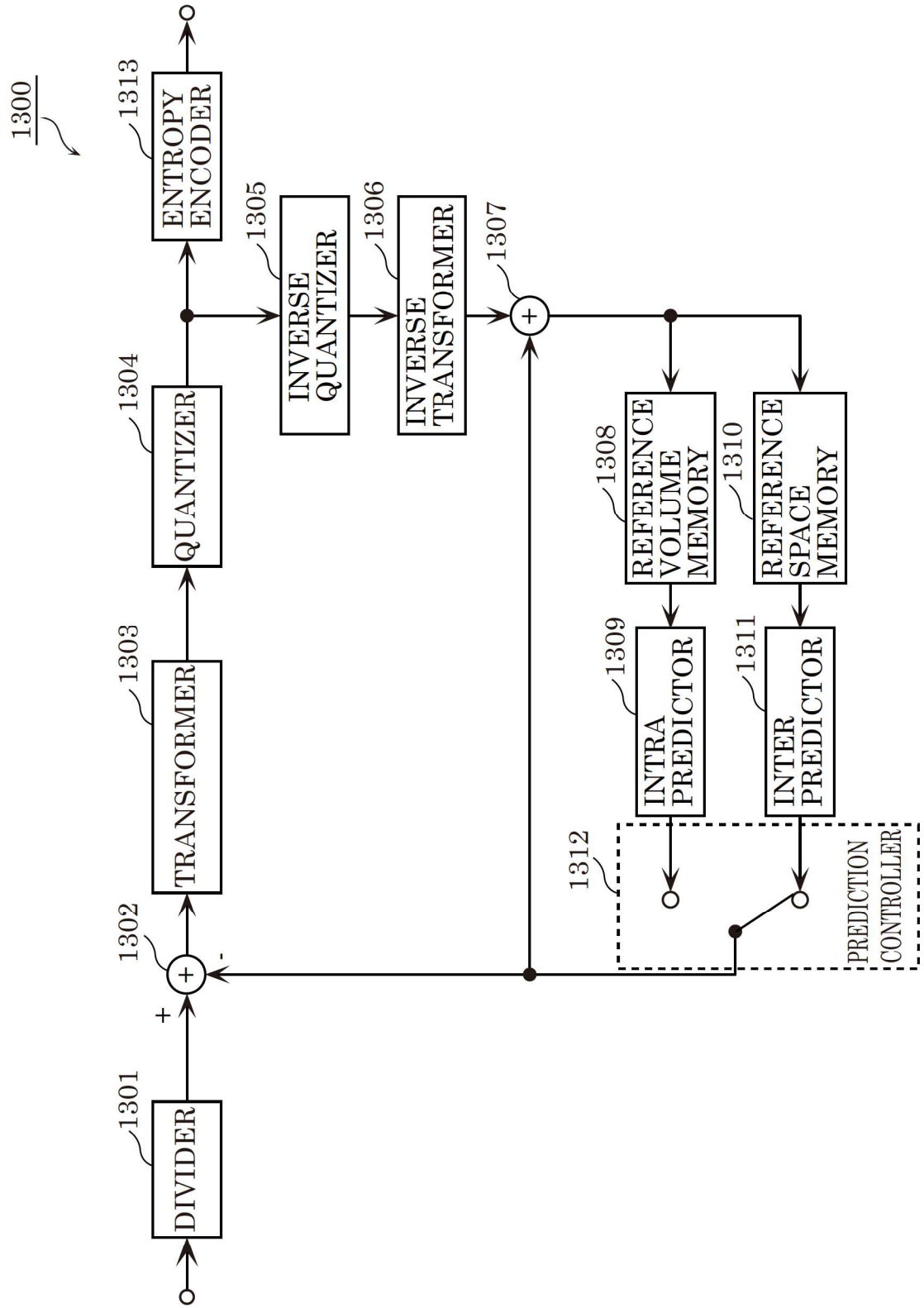


FIG. 38

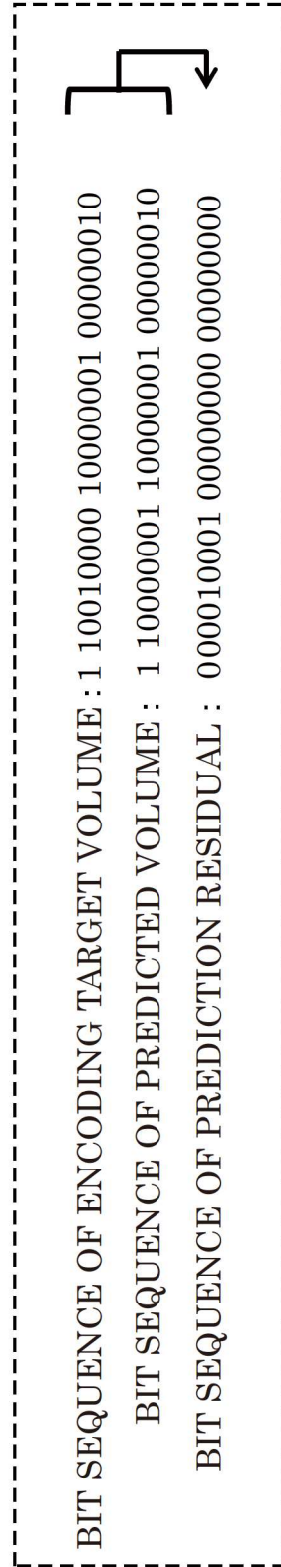


FIG. 39

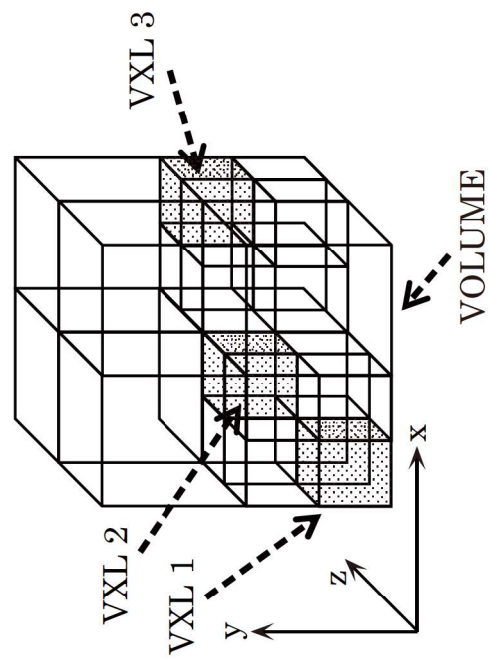


FIG. 40

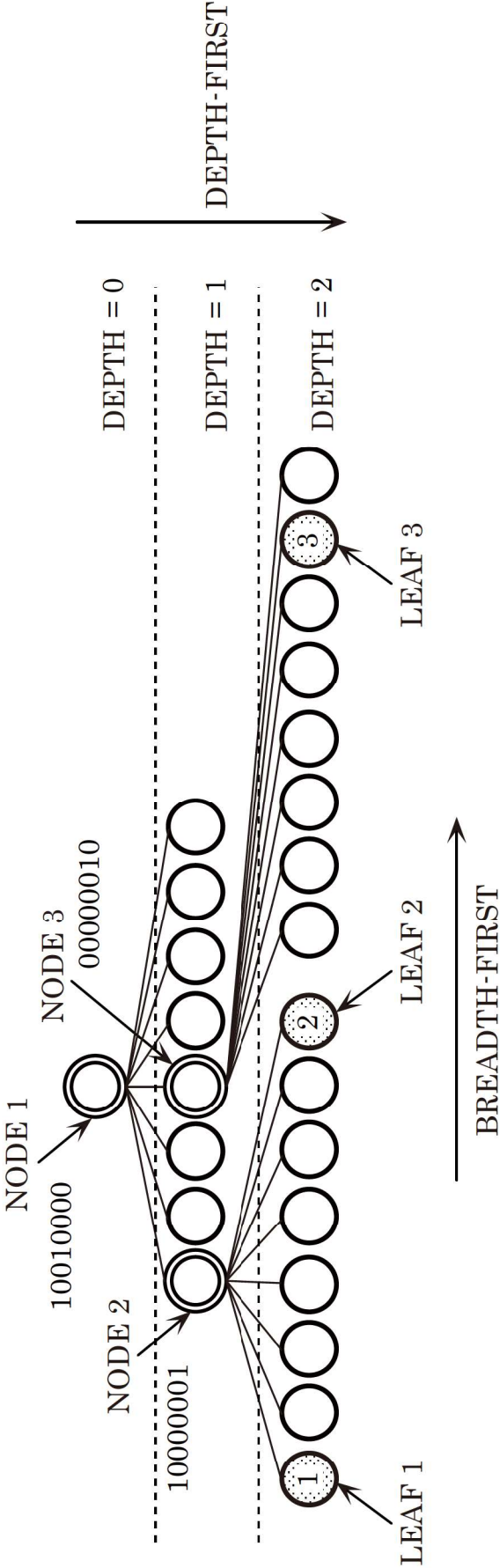


FIG. 41

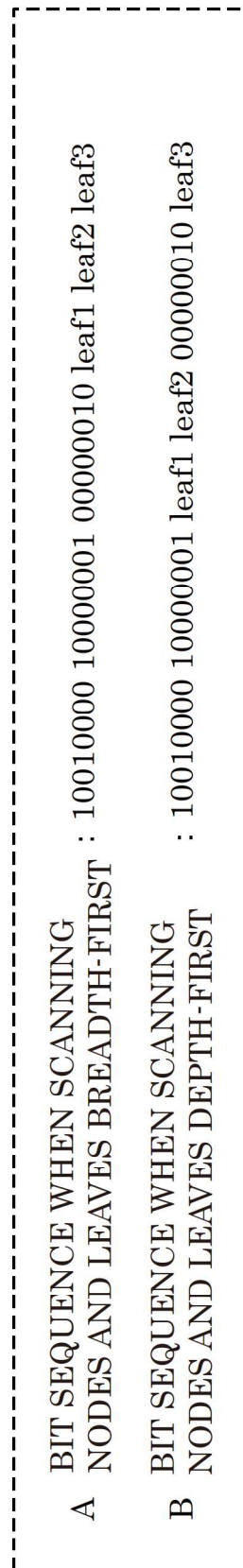


FIG. 42

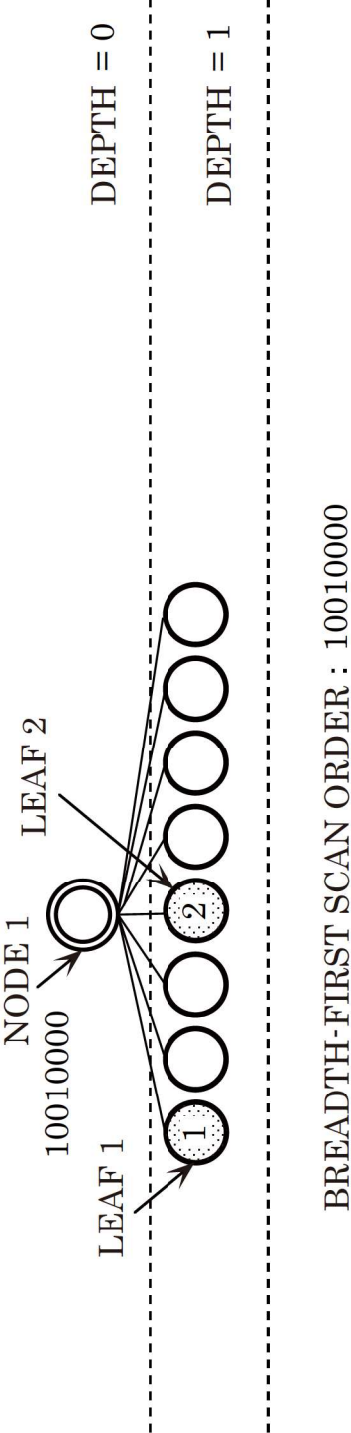


FIG. 43

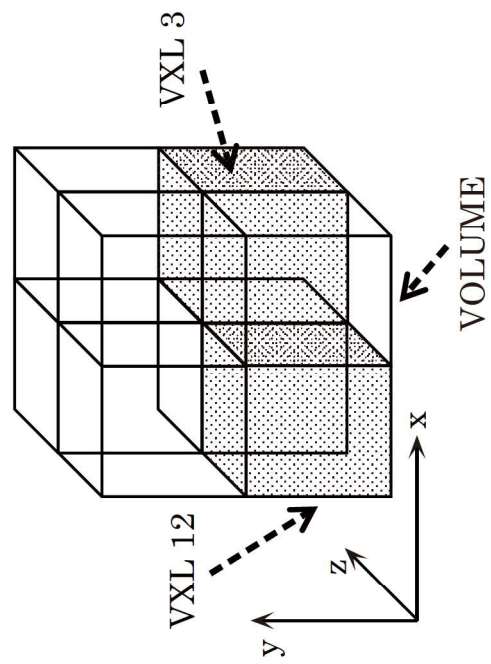


FIG. 44

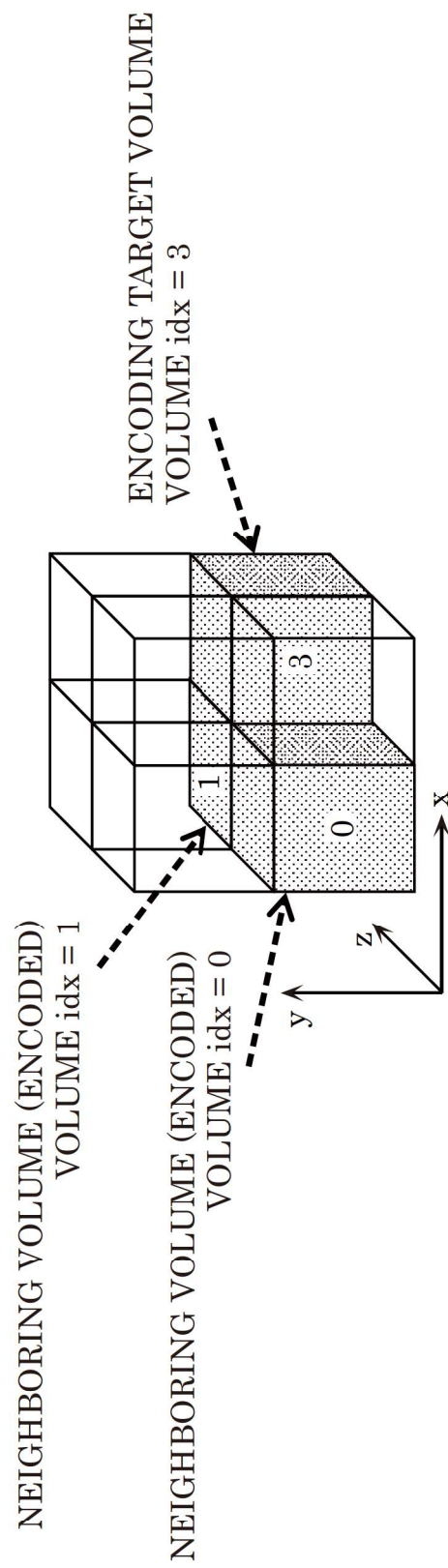


FIG. 45

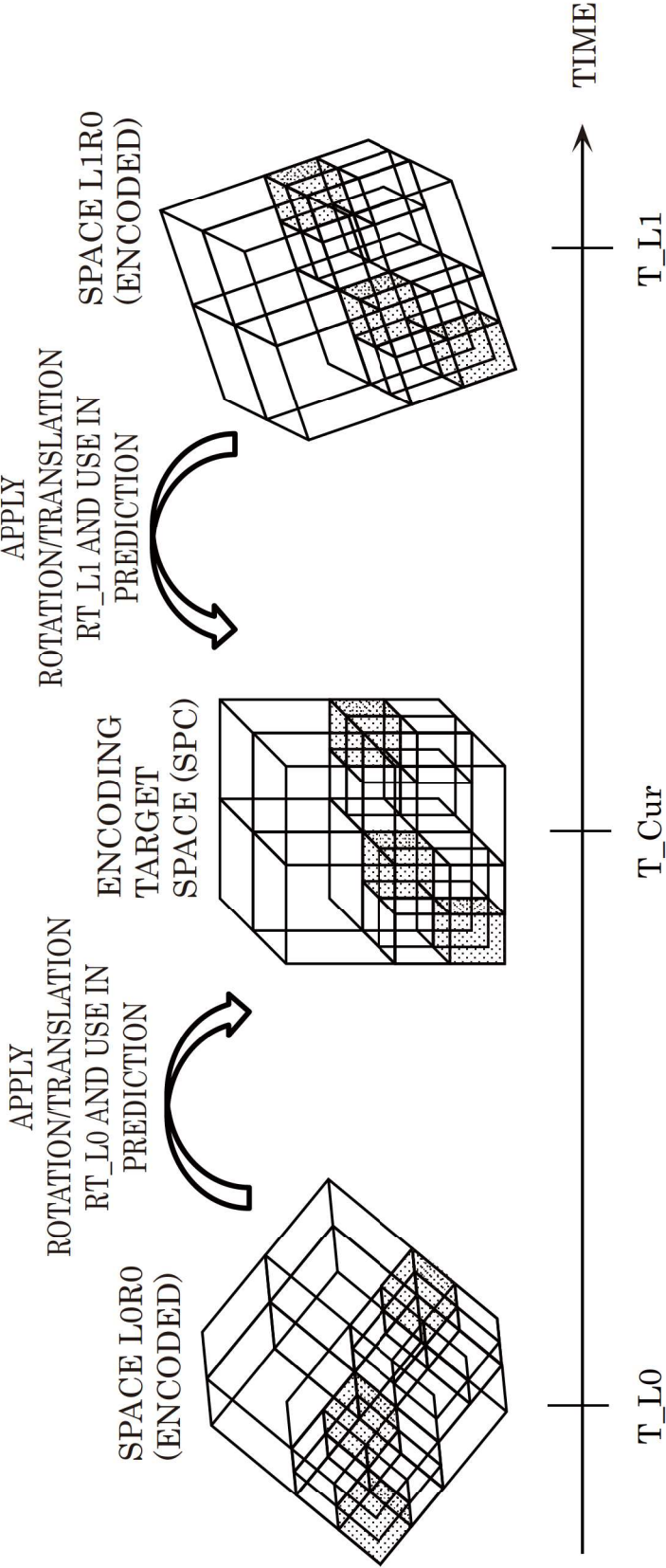


FIG. 46

```
space_header() {  
    ...  
    for (i=0; i<MaxRefSpc_l0;i++) {  
        RT_flag_l0[i]  
        if (RT_flag_l0[i]) {  
            R_l0[i]  
            T_l0[i]  
        }  
    }  
    ...  
    for (i=0; i<MaxRefSpc_l1;i++) {  
        RT_flag_l1[i]  
        if (RT_flag_l1[i]) {  
            R_l1[i]  
            T_l1[i]  
        }  
    }  
    ...  
}
```

FIG. 47

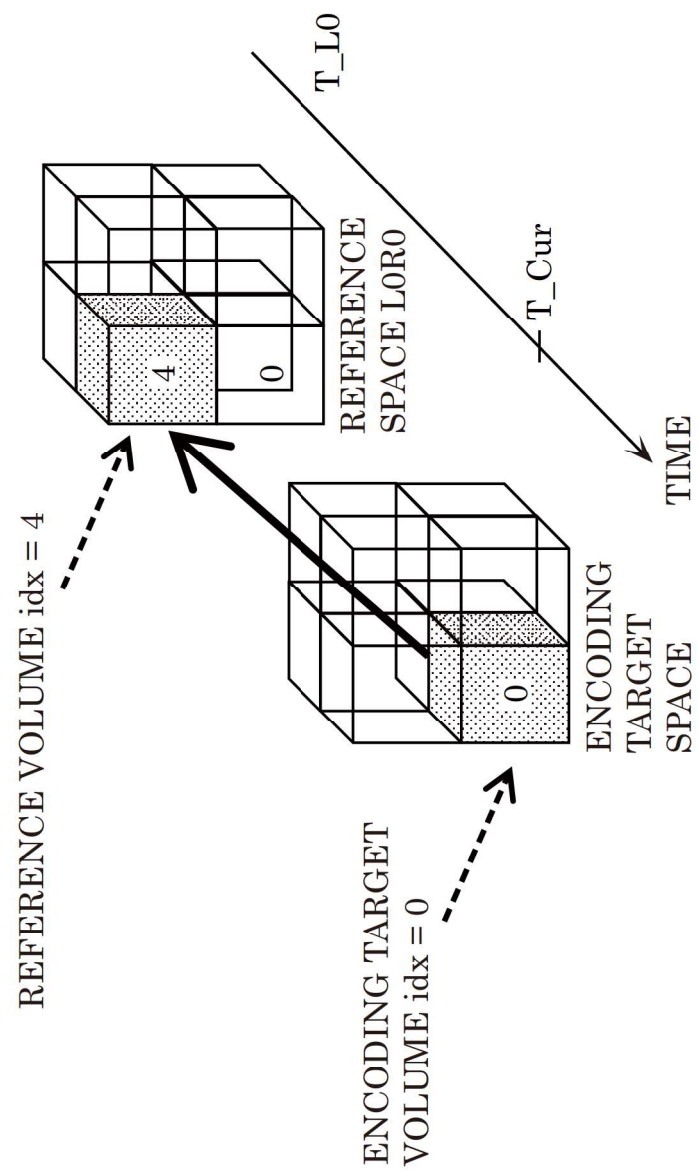


FIG. 48

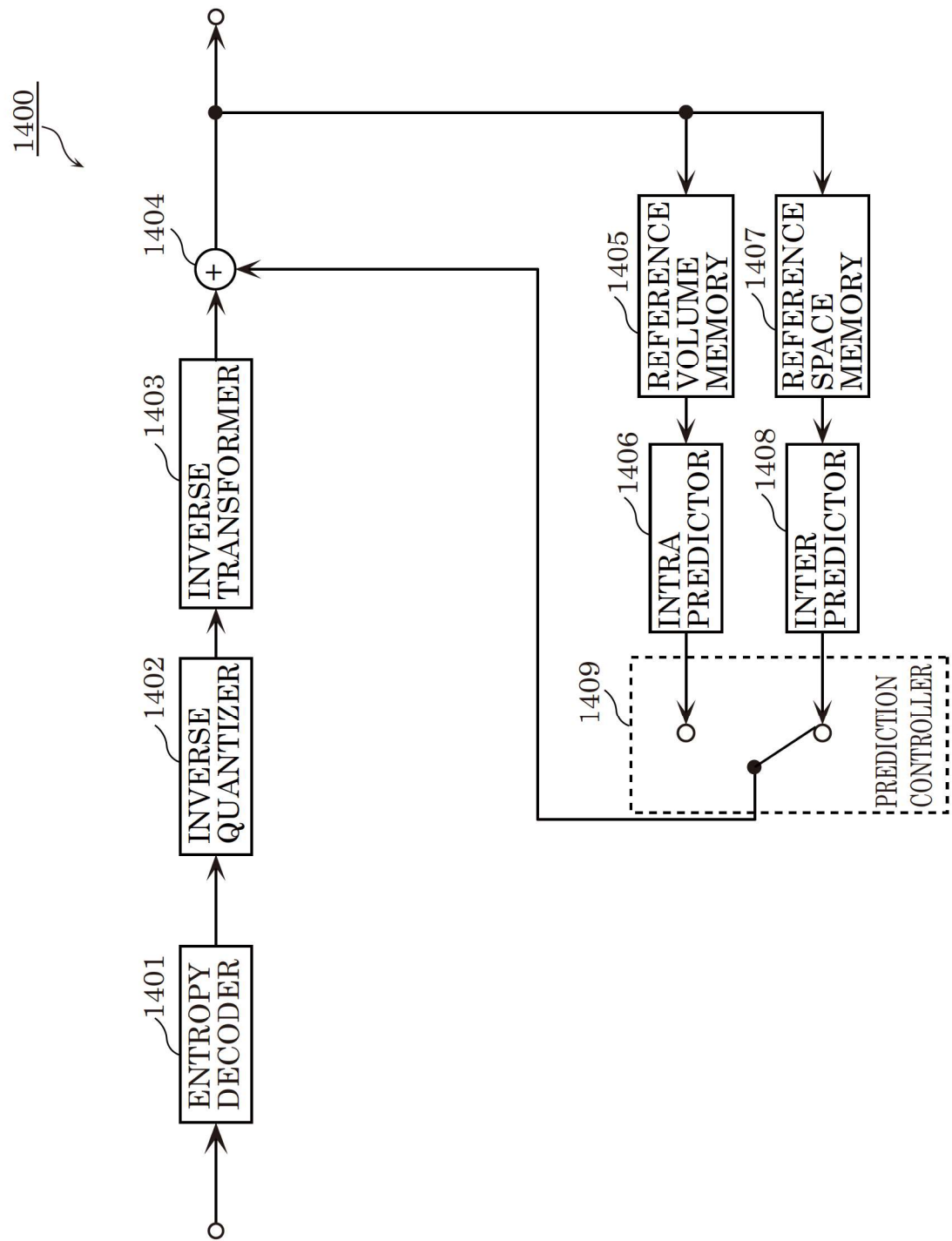


FIG. 49

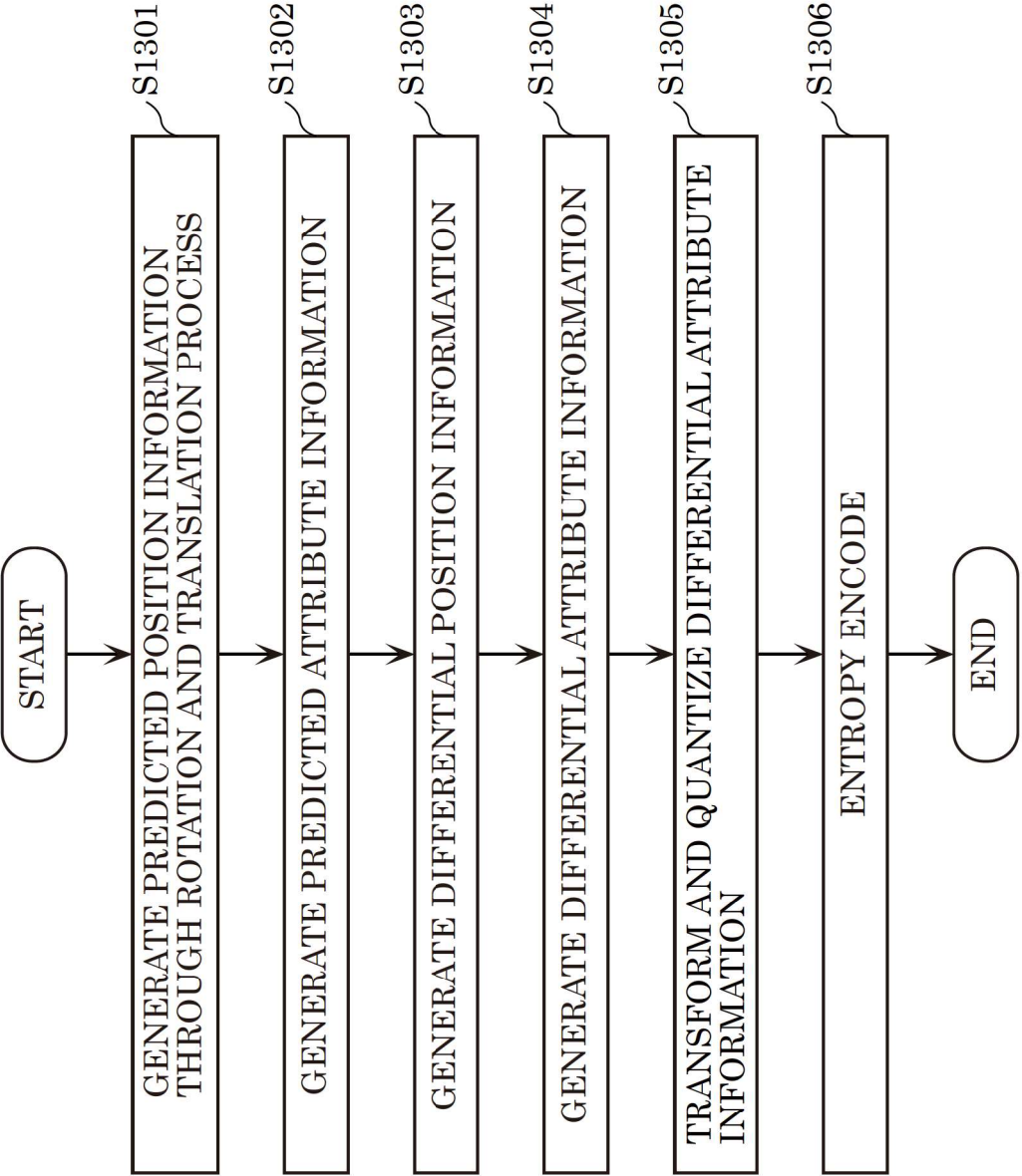


FIG. 50

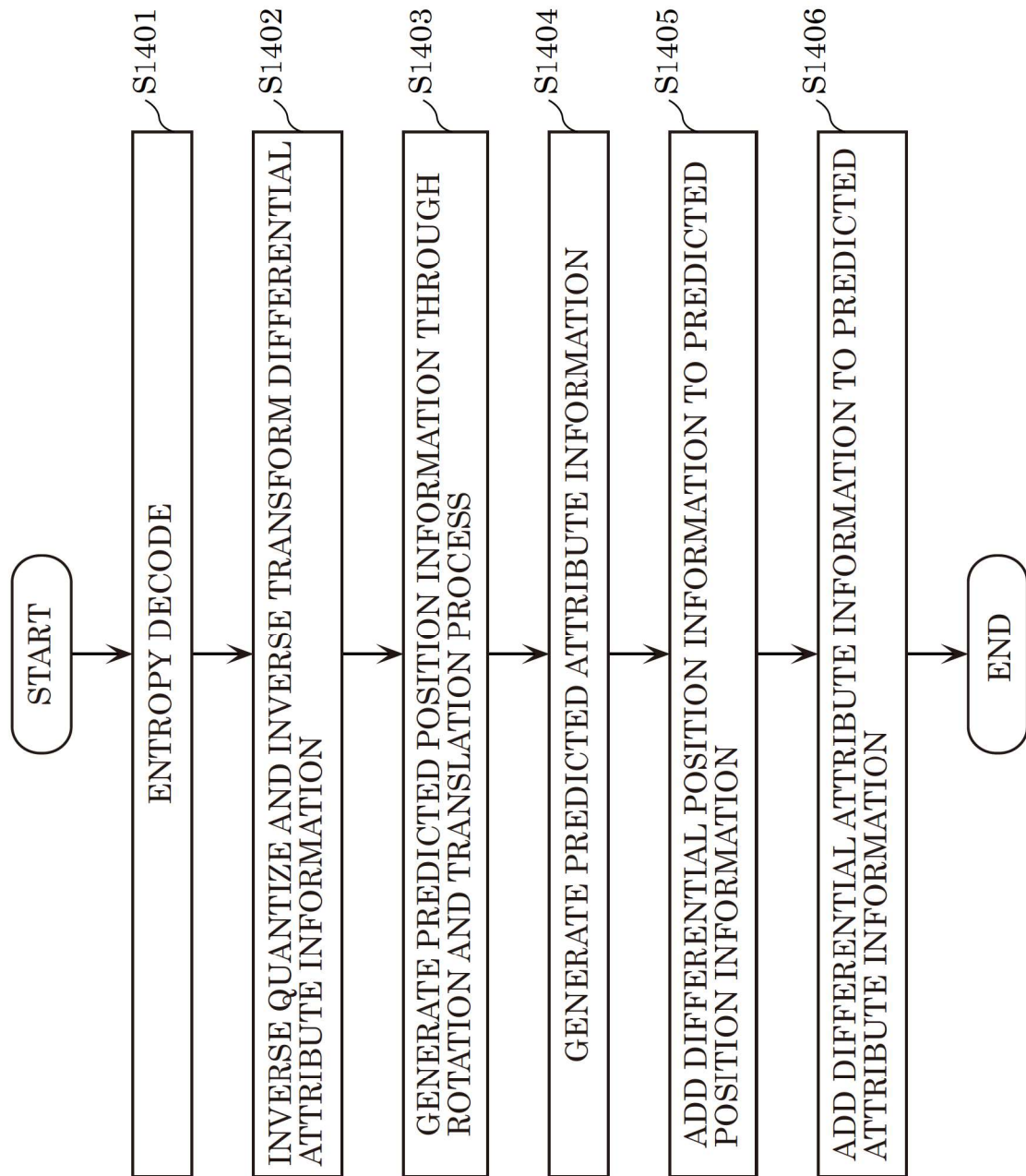


FIG. 51

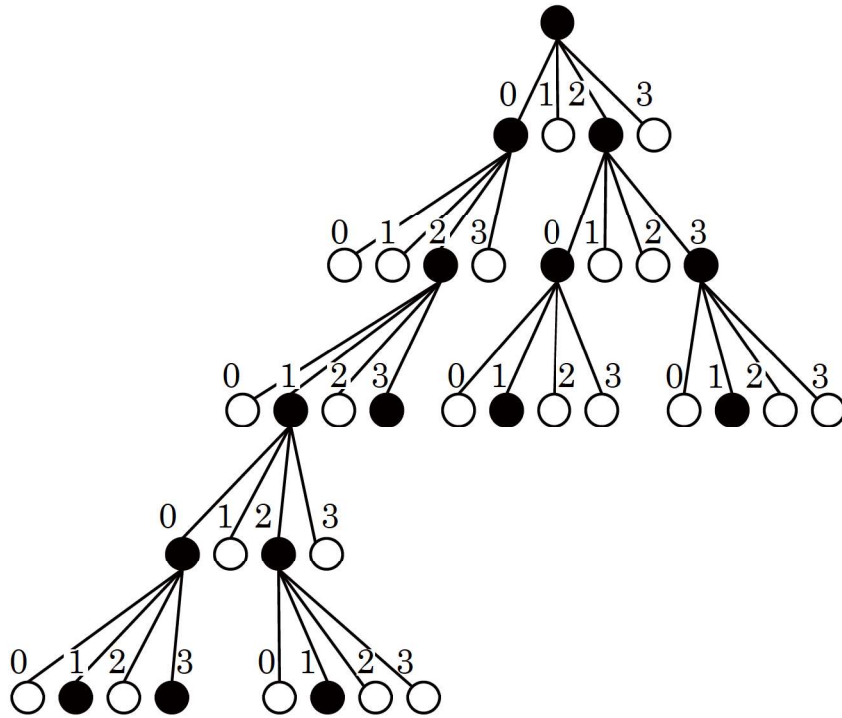


FIG. 52

<u>OCCUPANCY CODE</u>		
1010		
0010	1001	
0101	0100	0100
1010		
0101	0100	

FIG. 53
SIMILARITY INFORMATION
(GEOMETRY INFORMATION,
STRUCTURE INFORMATION, ATTRIBUTE INFORMATION)

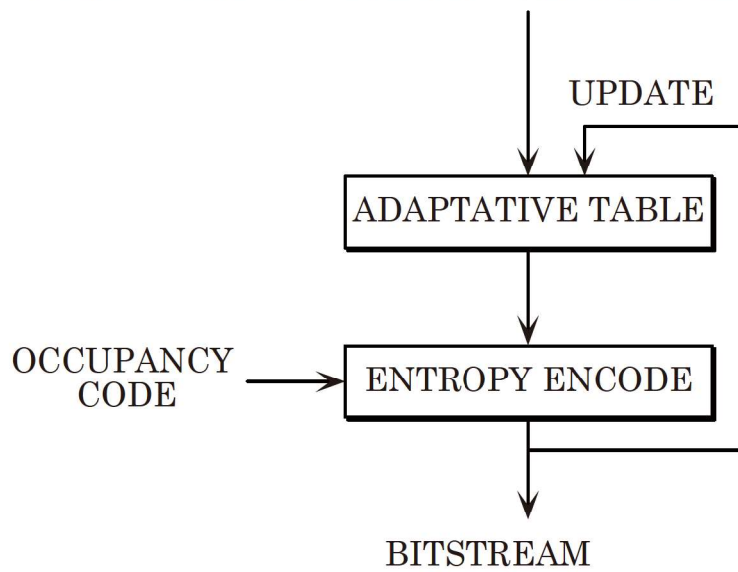


FIG. 54

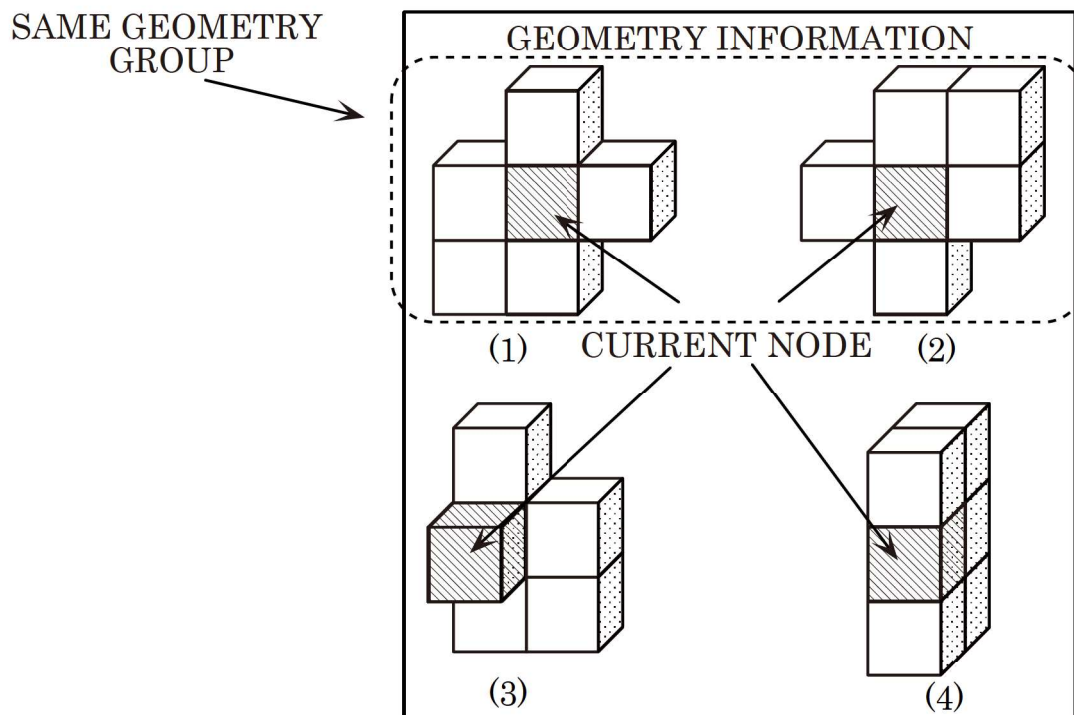


FIG. 55

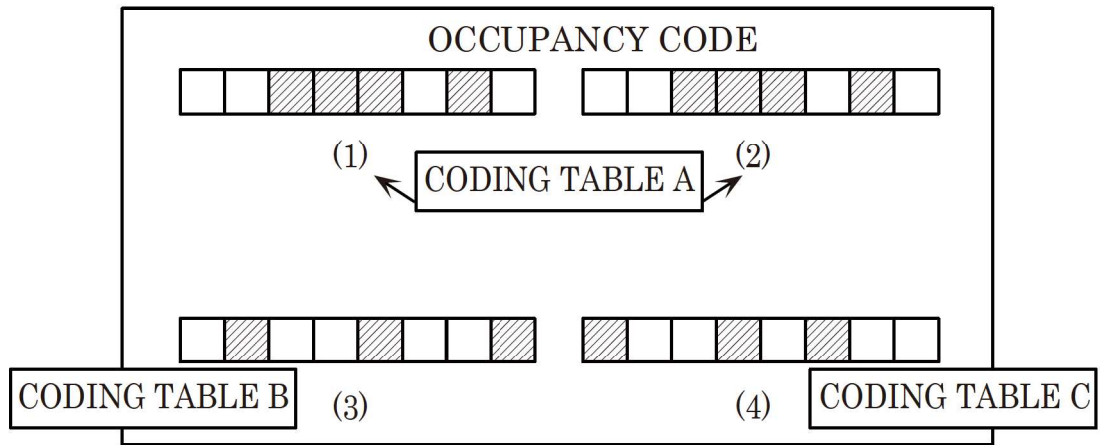


FIG. 56

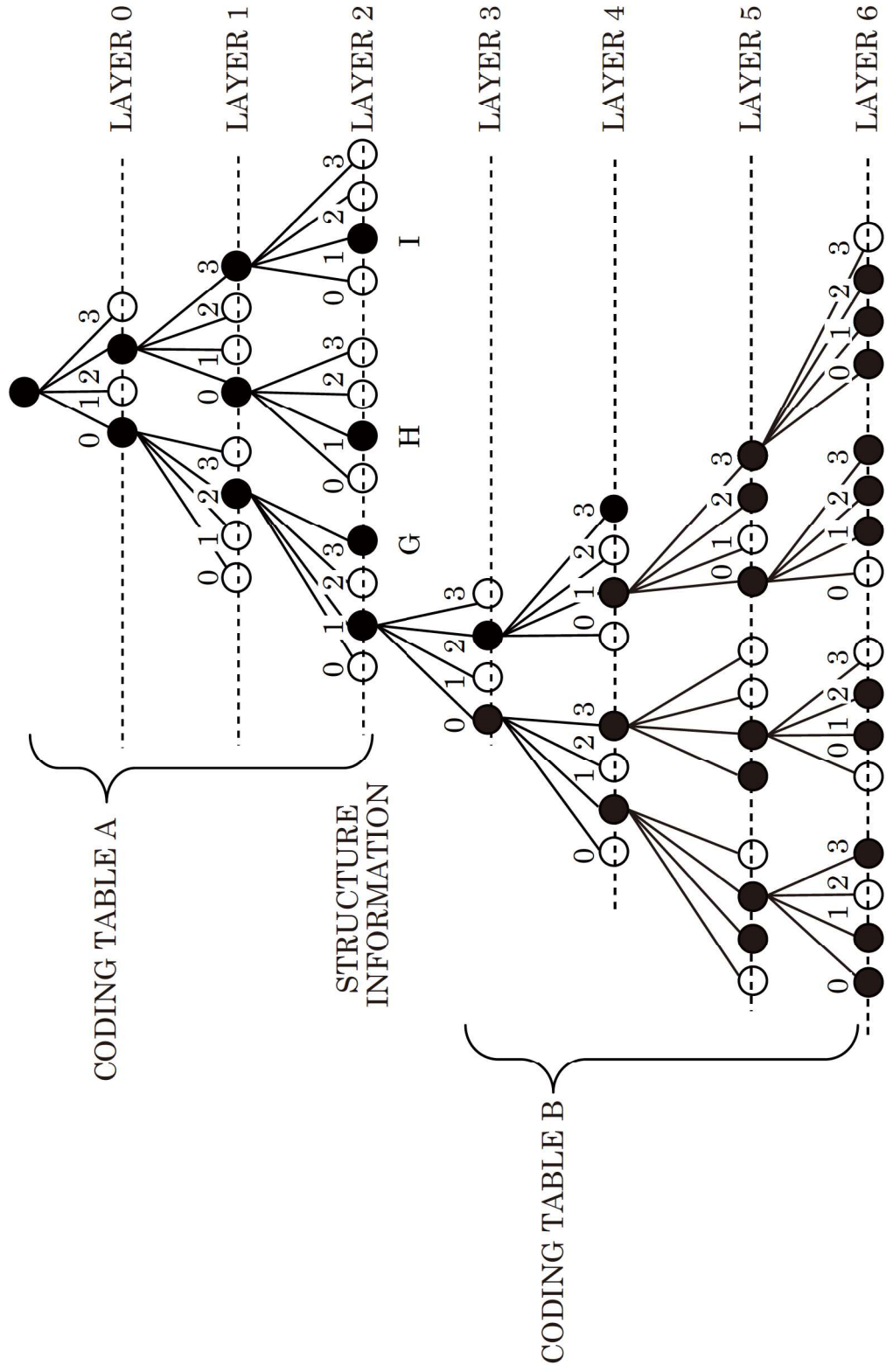


FIG. 57

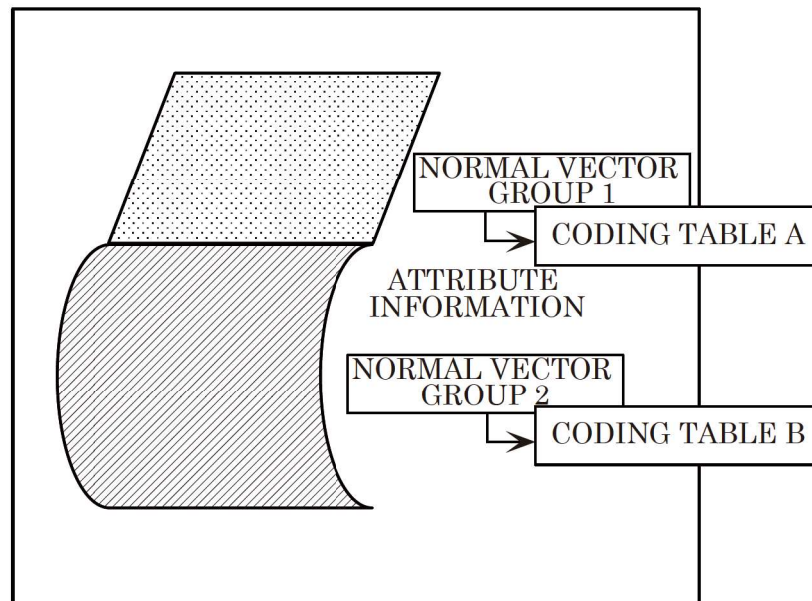


FIG. 58

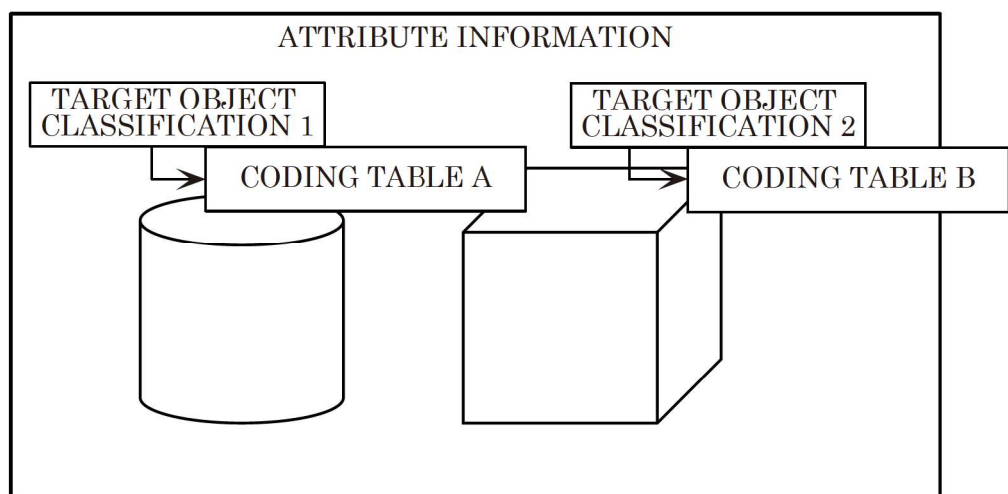


FIG. 59

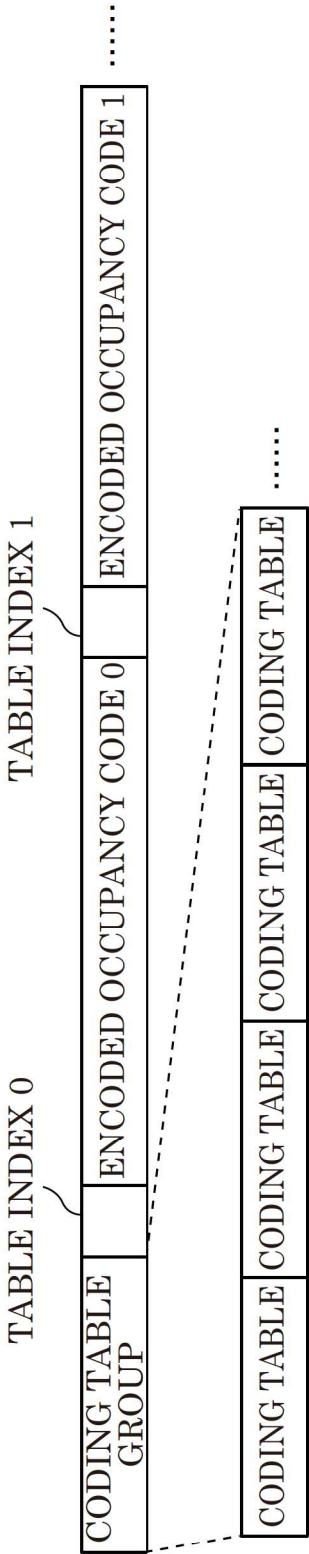


FIG. 60

TABLE INDEX 0

OCCUPANCY CODE	CONTEXT MODEL	CONTEXT MODEL TYPE
00000000	MODEL 0-0	TYPE A
00000001		
.....		
11111111	MODEL 0-X	TYPE X

FIG. 61

TABLE INDEX 1

OCCUPANCY CODE	CONTEXT MODEL	CONTEXT MODEL TYPE
00000000	MODEL 1-0	TYPE A
00000001	MODEL 1-1	TYPE B
.....		
11111111	MODEL 1-Y	TYPE Y

FIG. 62

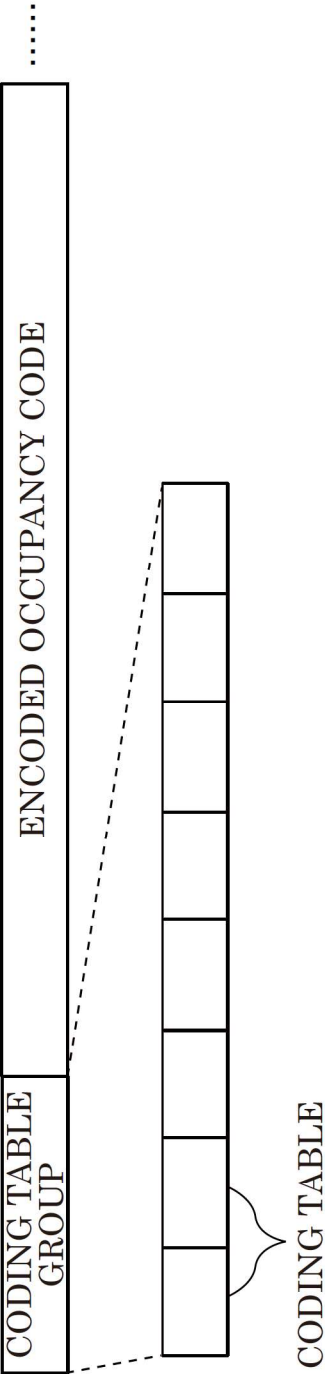


FIG. 63

TABLE INDEX 0

BIT NUMBER OF OCCUPANCY CODE	CONTEXT MODEL	CONTEXT MODEL TYPE
1	MODEL 0-0	TYPE A
2	MODEL 0-1	
.....		
8	MODEL 0-7	TYPE B

FIG. 64

TABLE INDEX 1

BIT NUMBER OF OCCUPANCY CODE	CONTEXT MODEL	CONTEXT MODEL TYPE
1	MODEL 1-0	TYPE A
2		TYPE A
.....		
8	MODEL 1-Y	TYPE B

FIG. 65

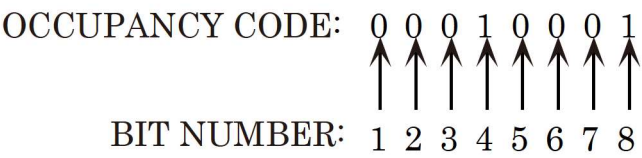


FIG. 66

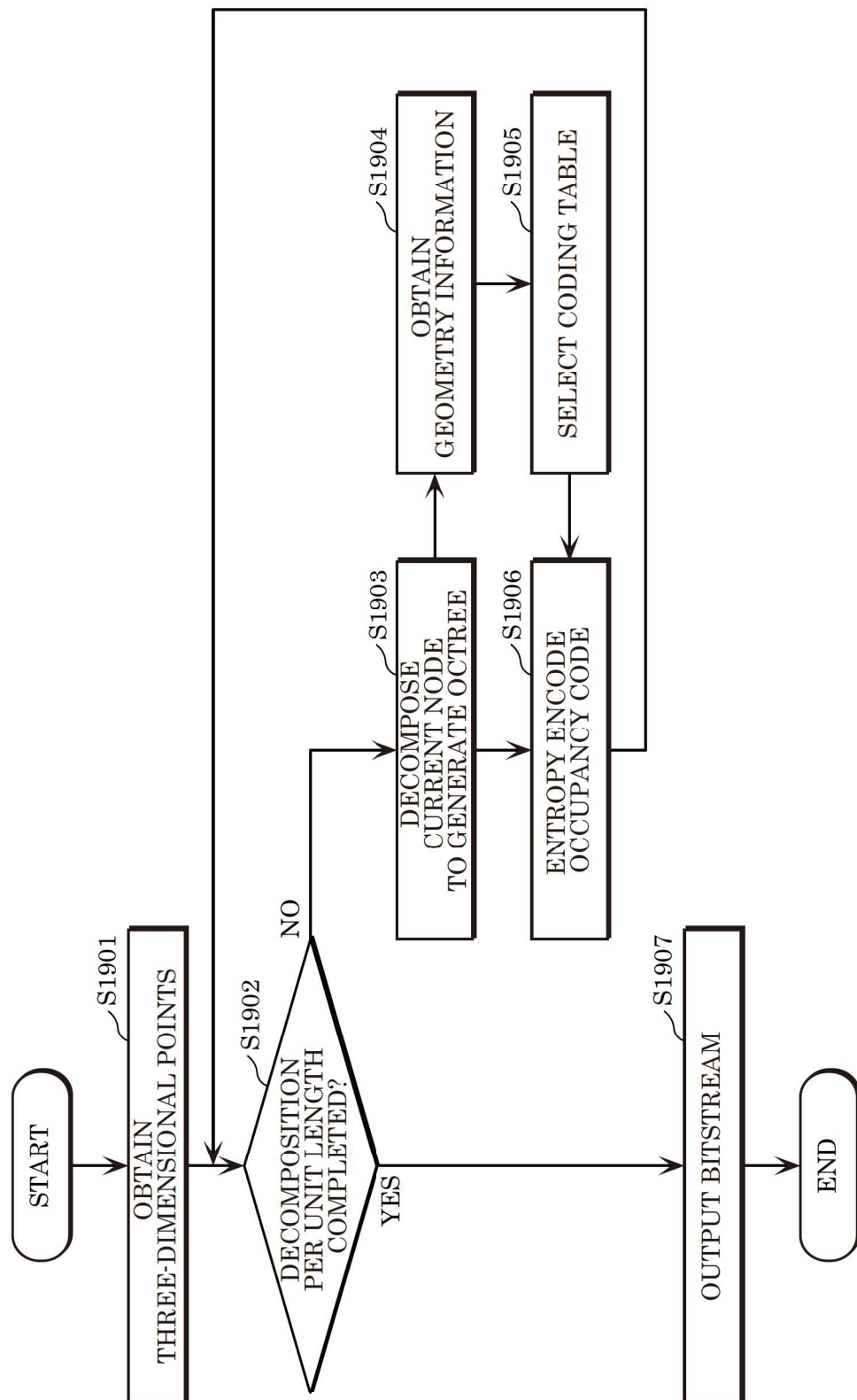


FIG. 67

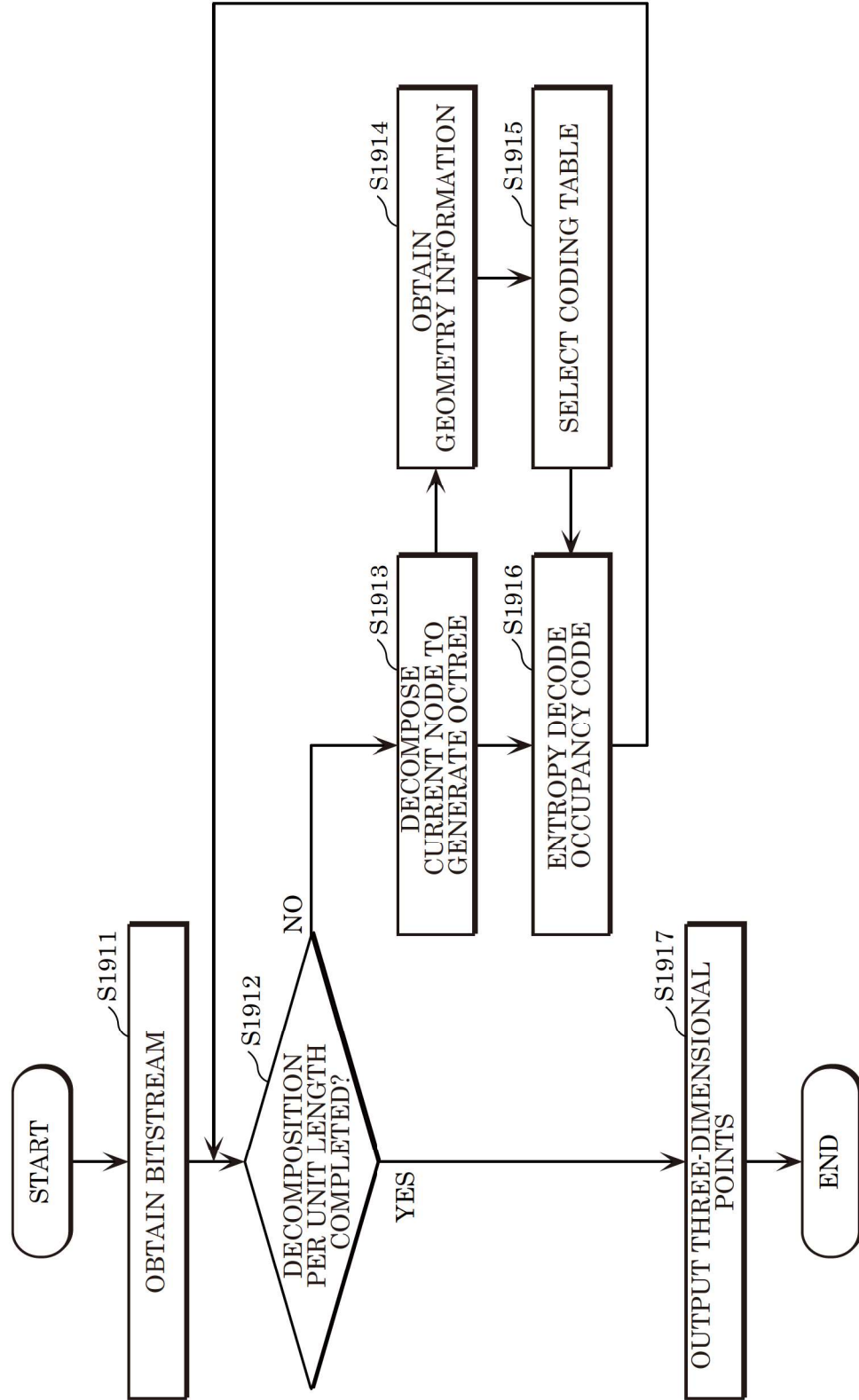


FIG. 68

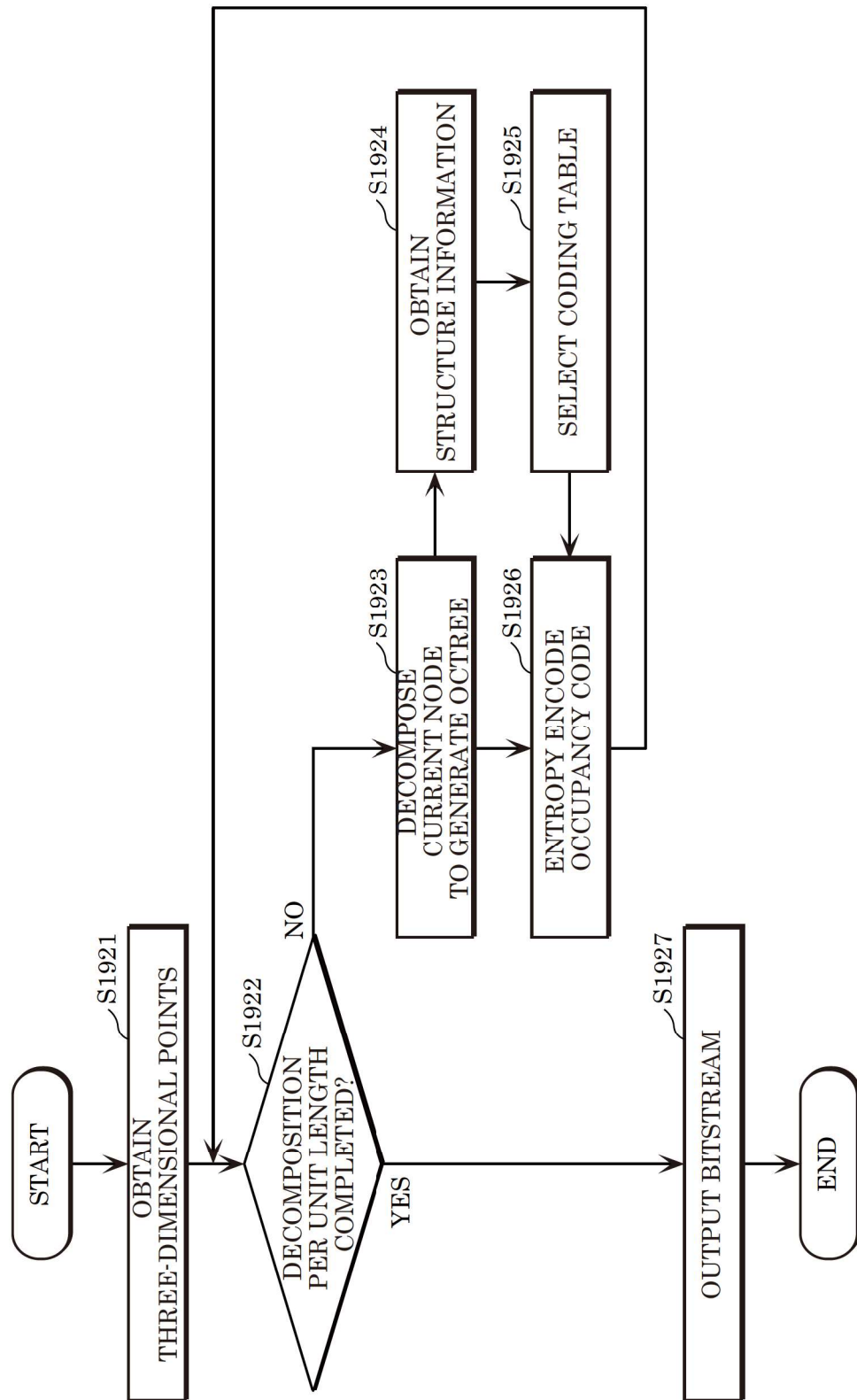


FIG. 69

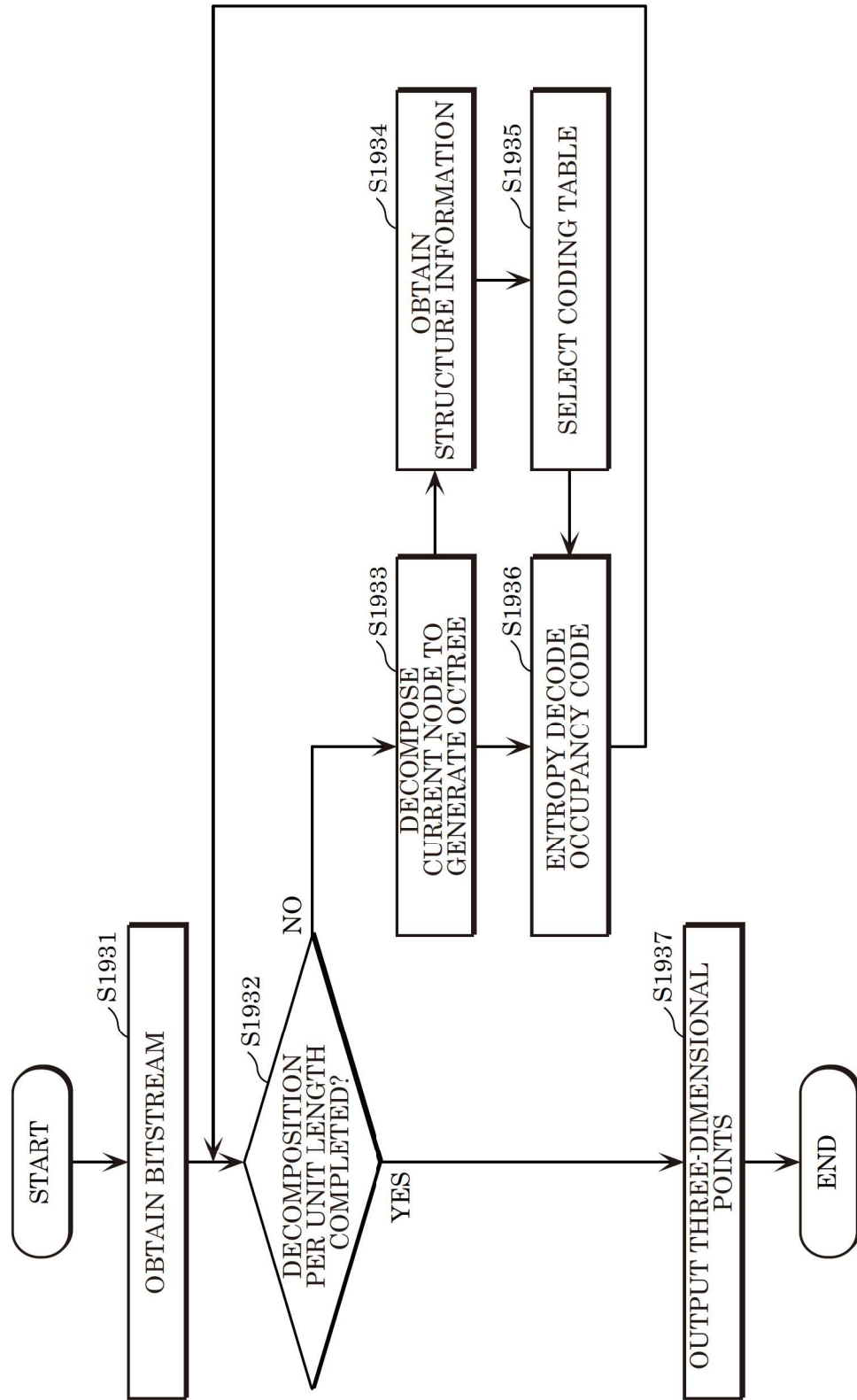


FIG. 70

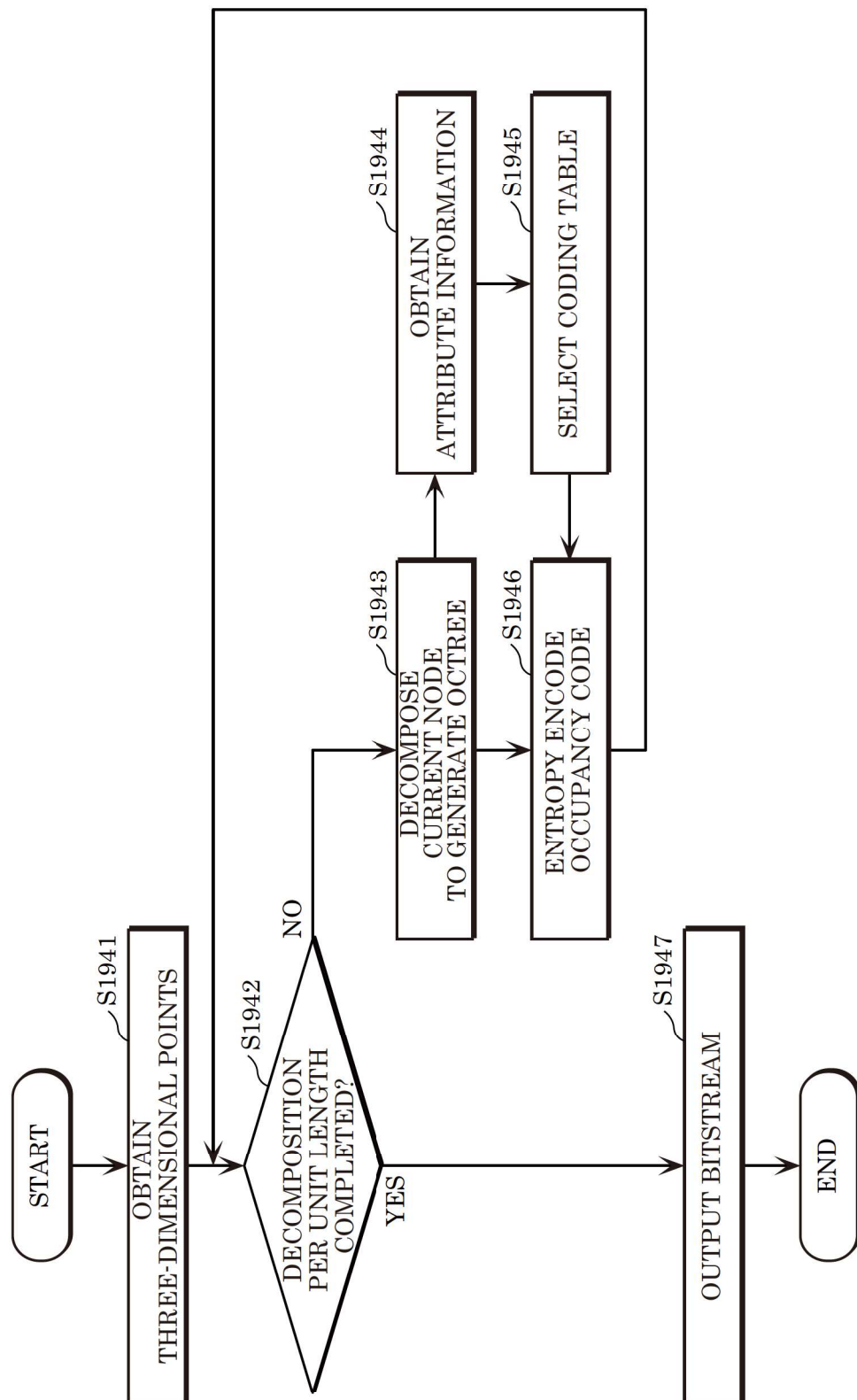


FIG. 71

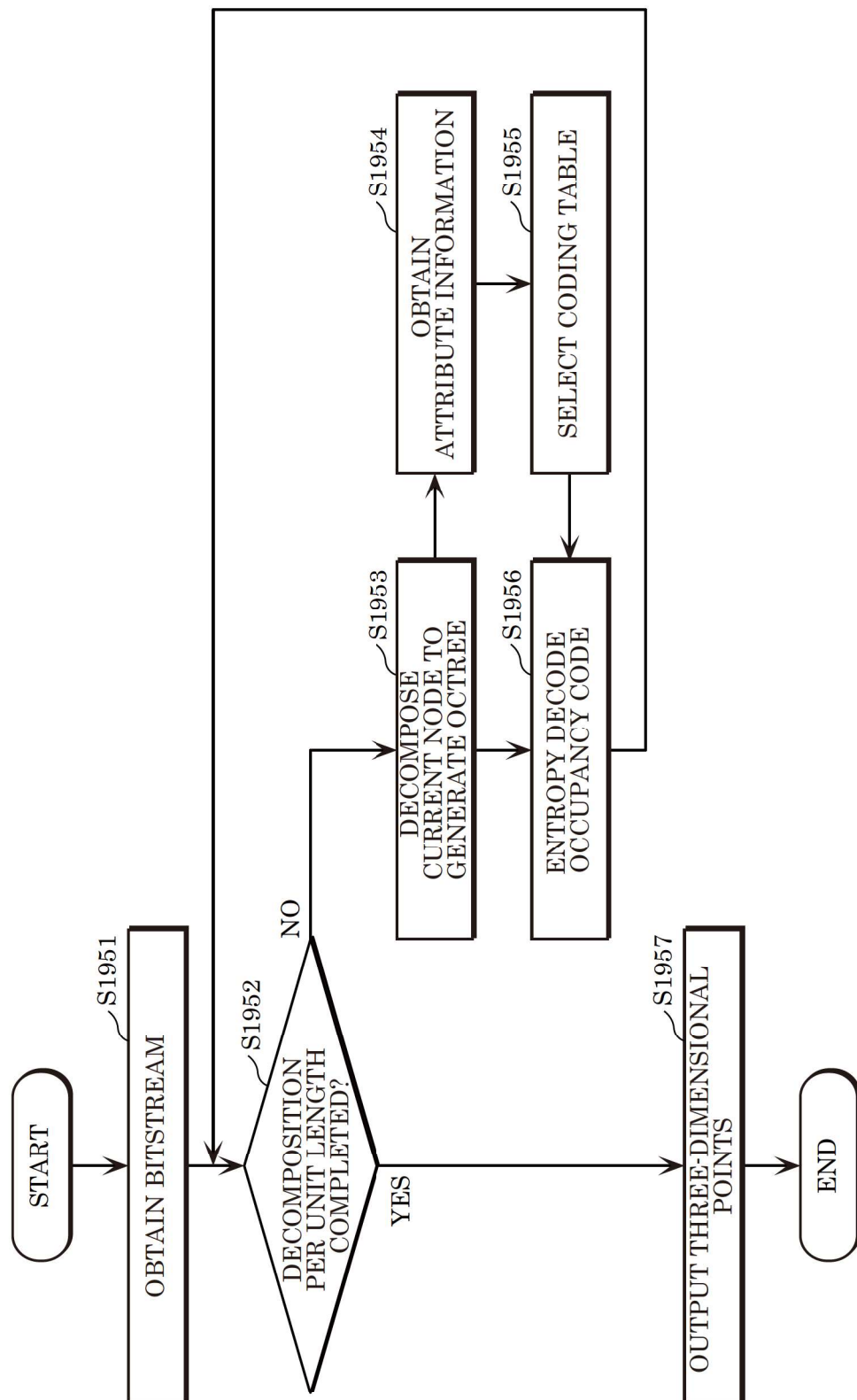


FIG. 72

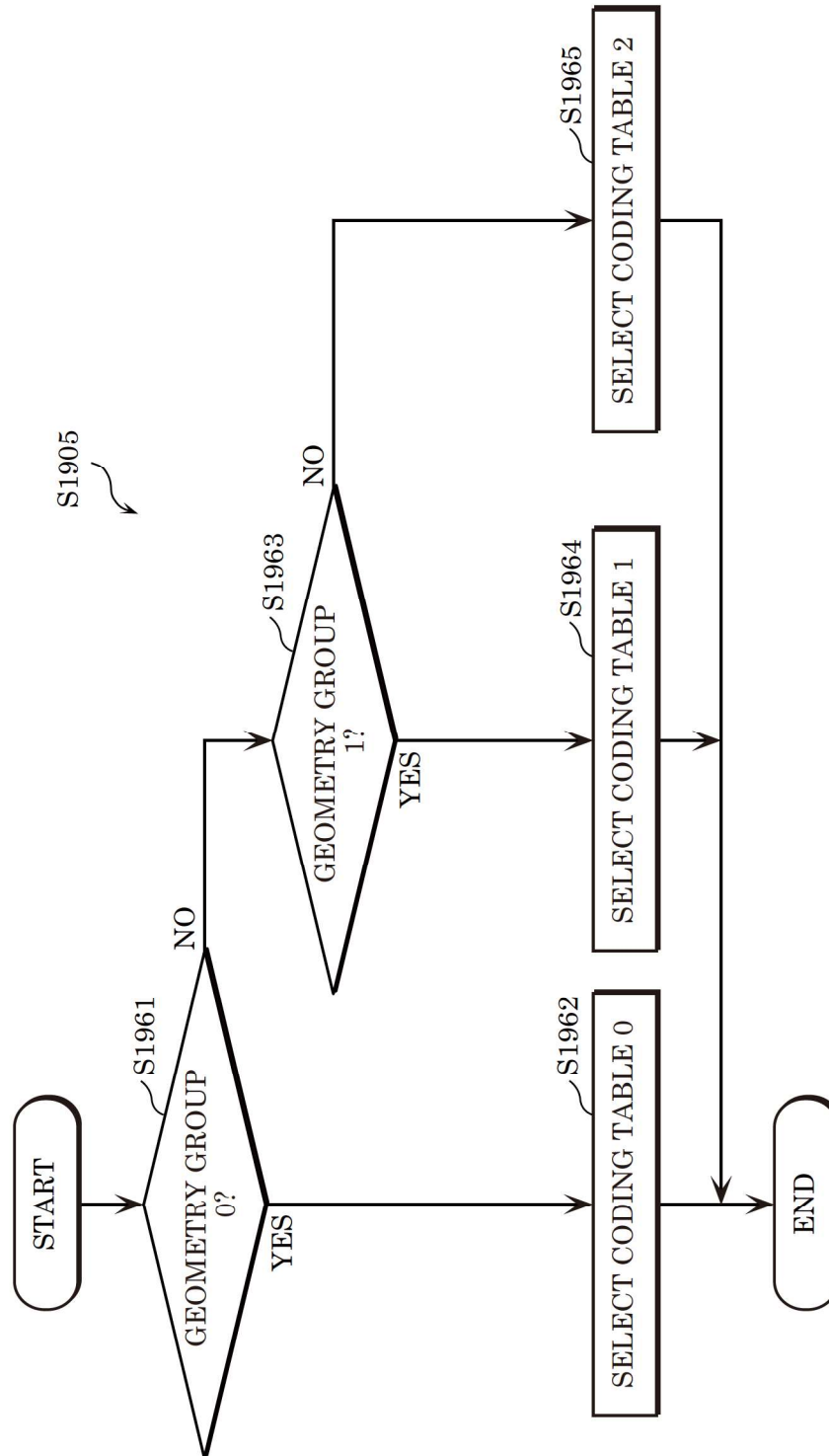


FIG. 73

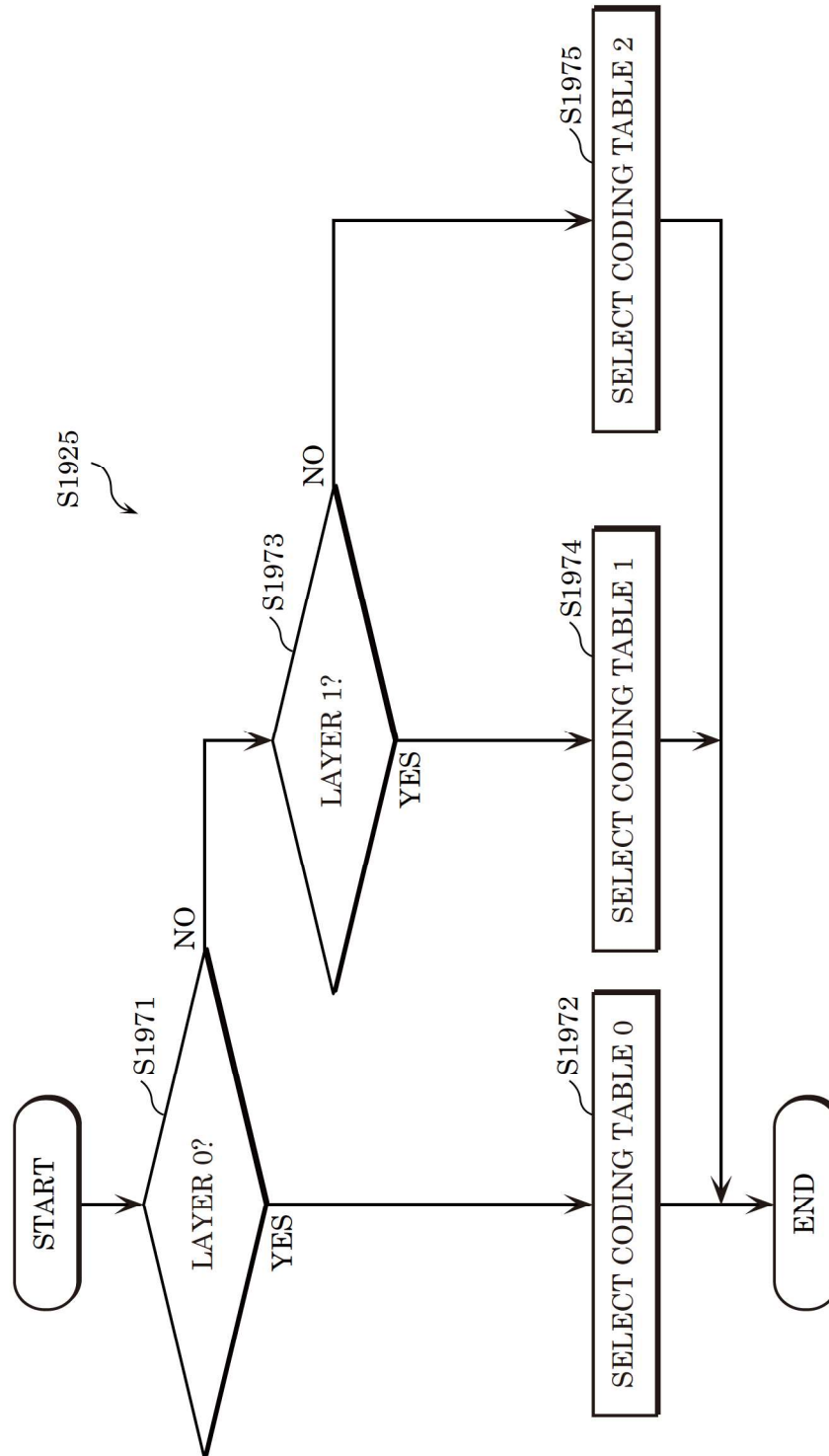


FIG. 74

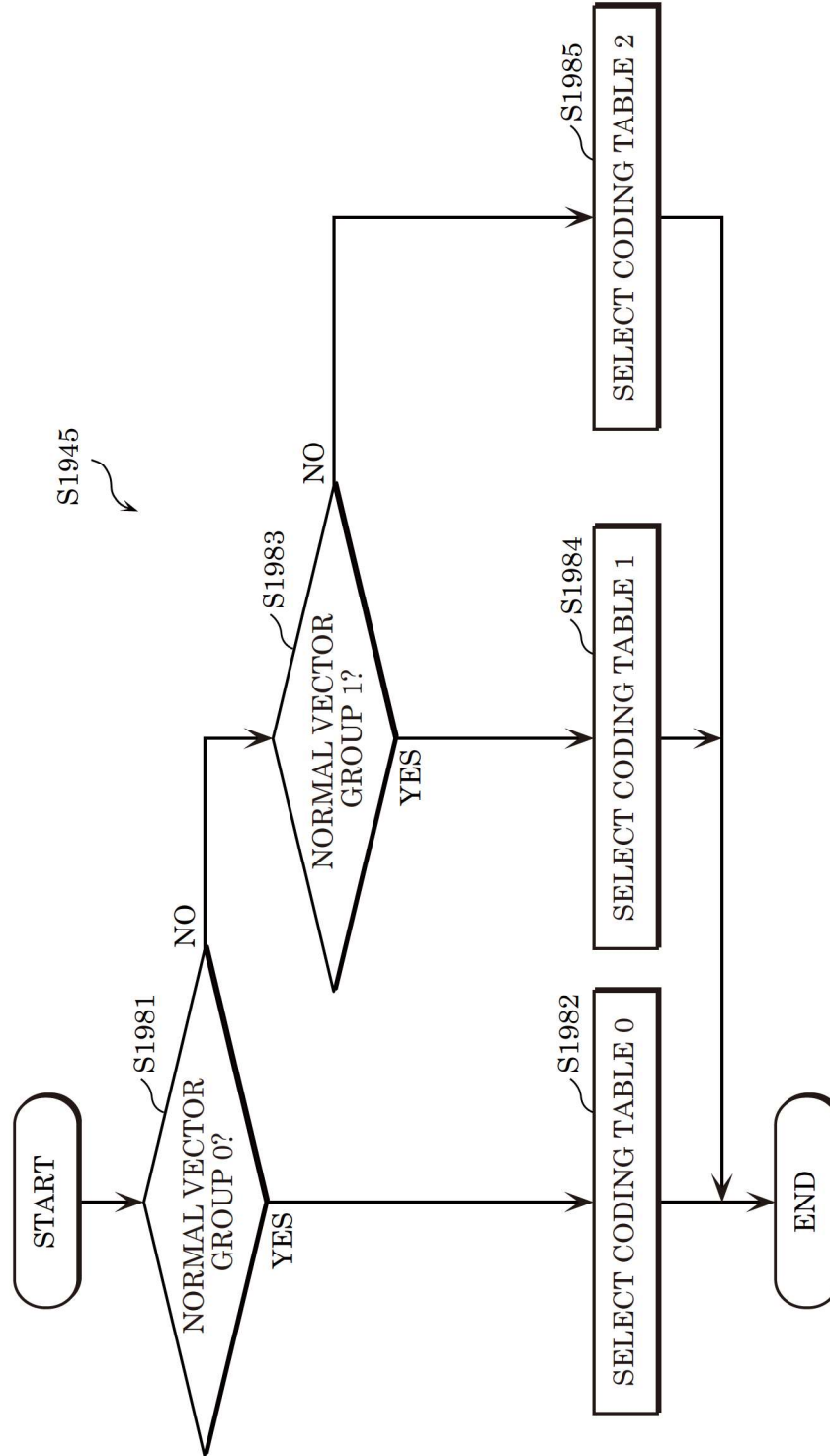


FIG. 75

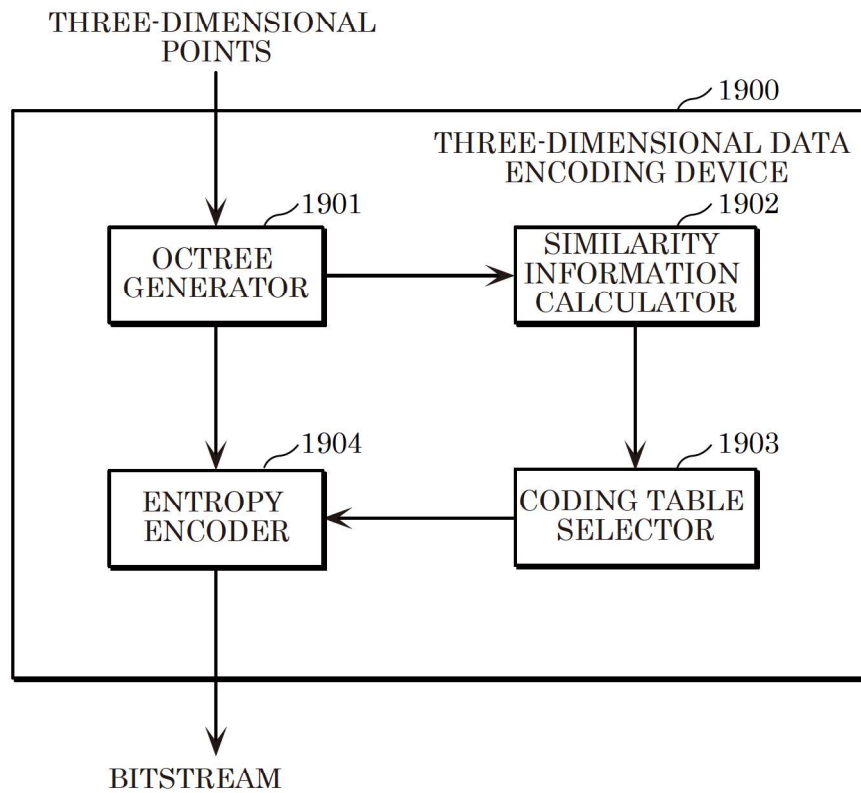


FIG. 76

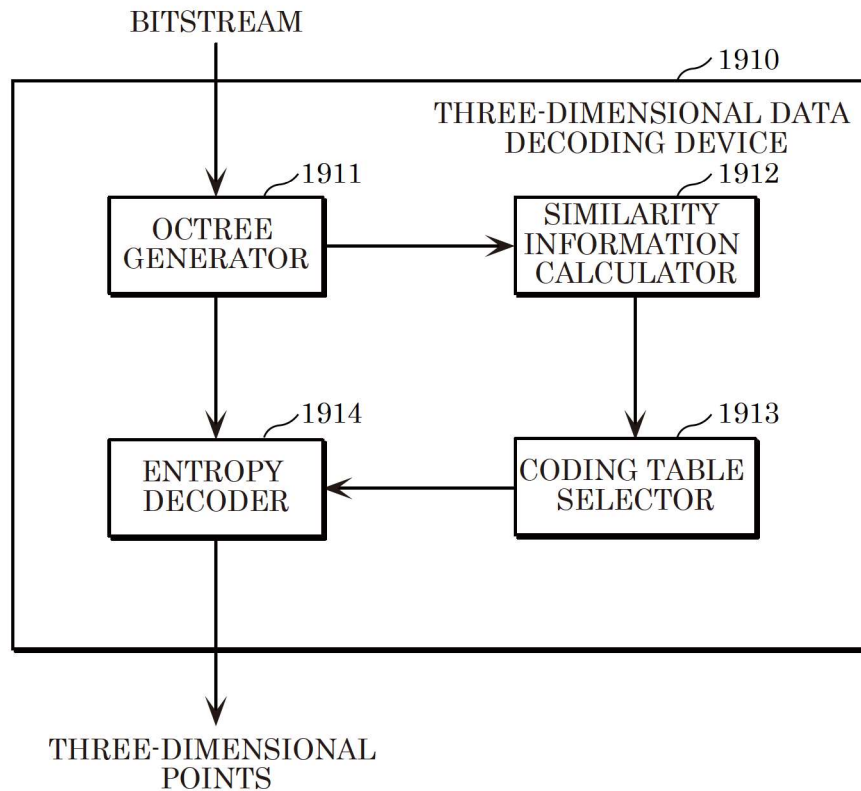


FIG. 77

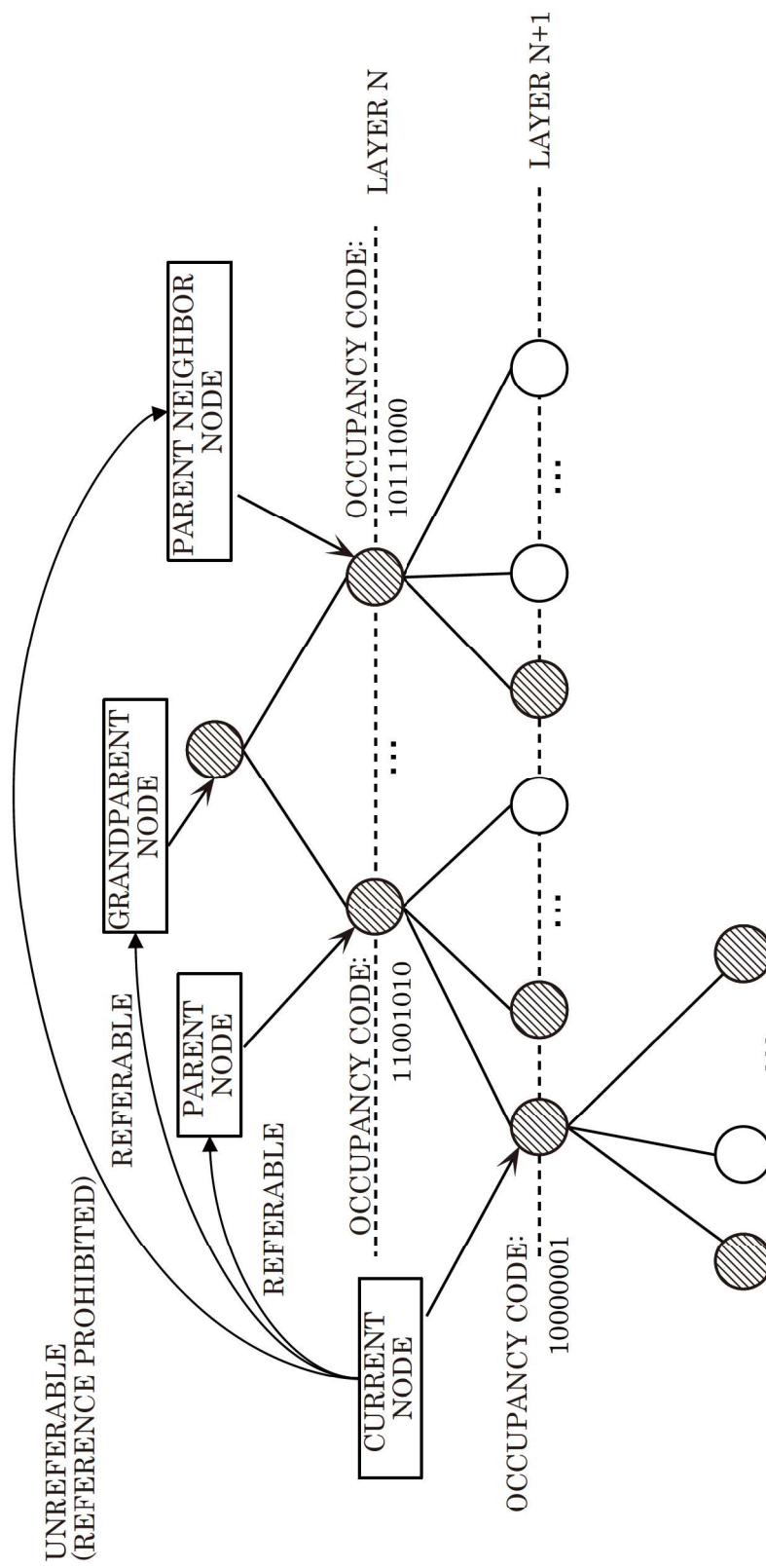


FIG. 78

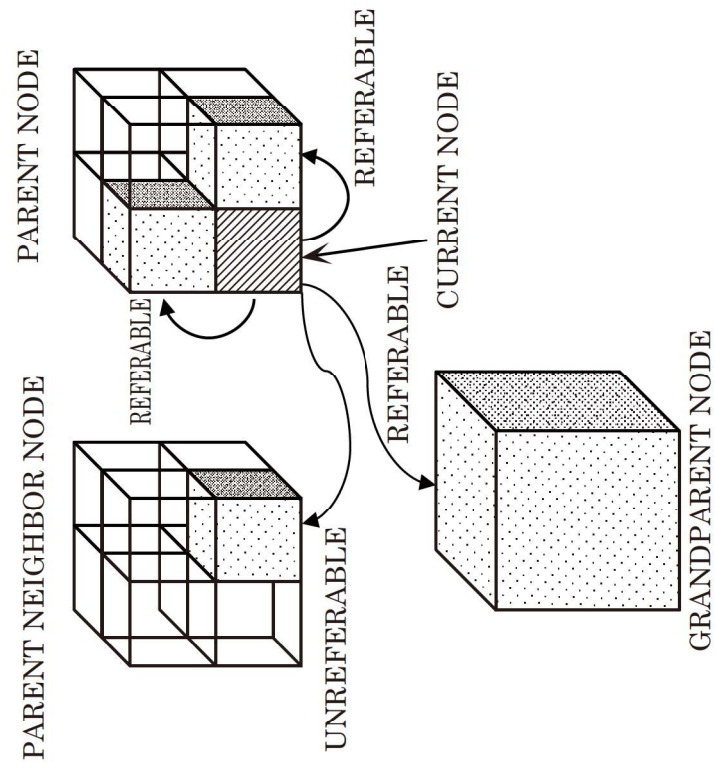
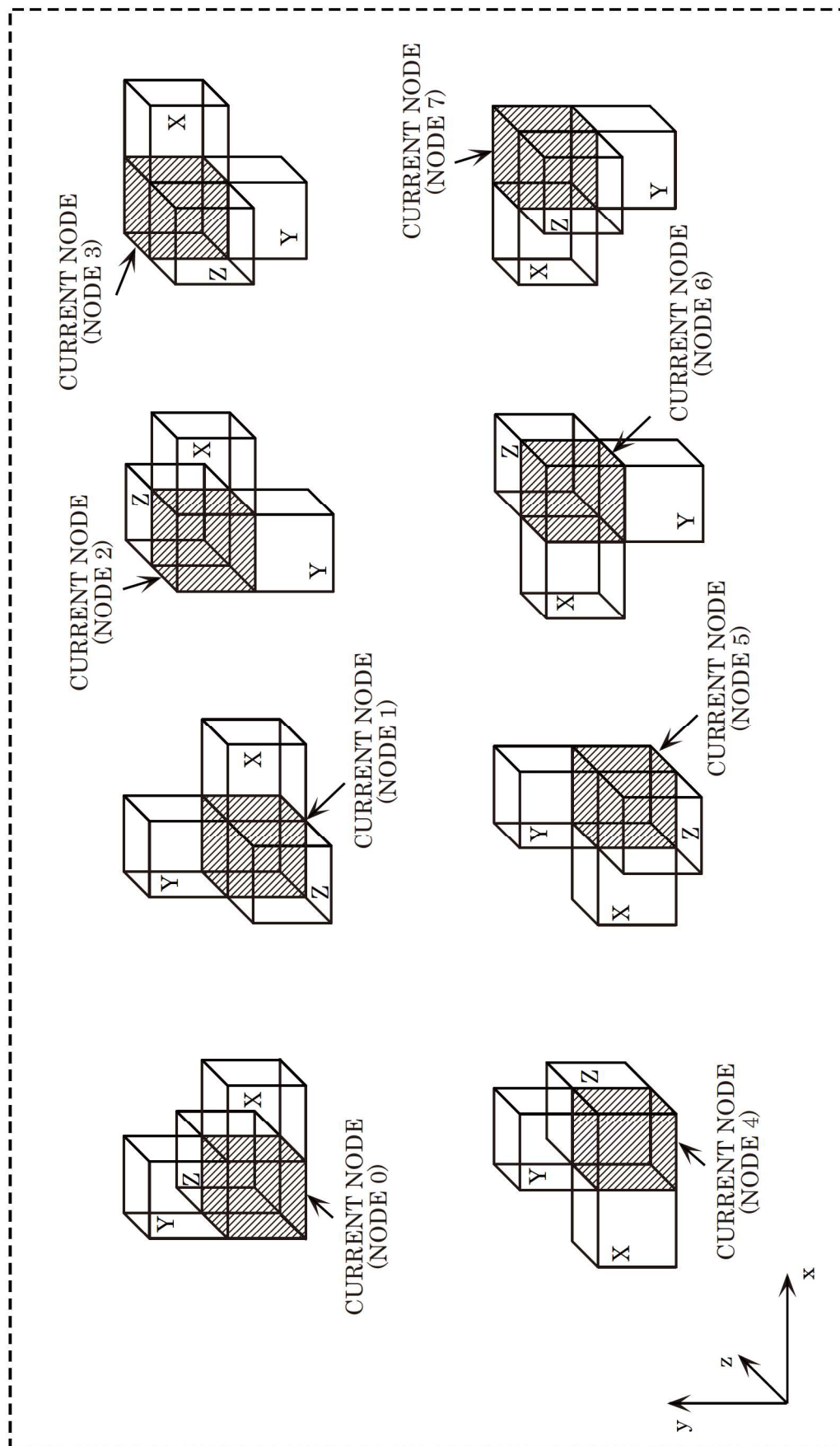


FIG. 79



EXAMPLE OF OCCUPANCY CODE
OF PARENT NODE:

OCCUPANCY
INFORMATION
OF NODE 7

OCCUPANCY
INFORMATION
OF NODE 0

THREE-DIMENSIONAL POINTS

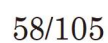


FIG. 83

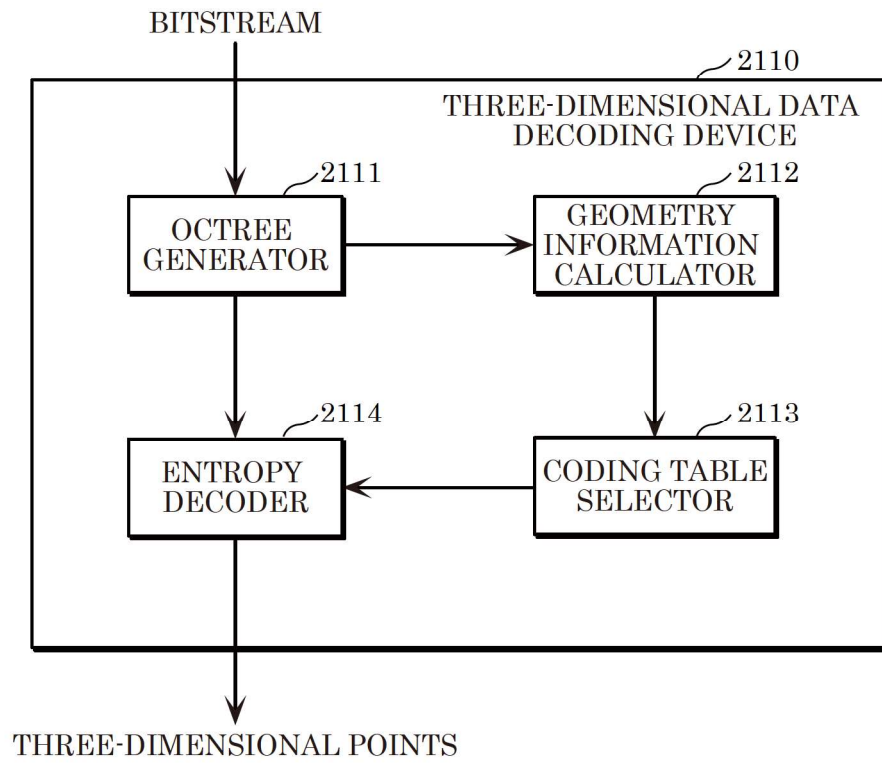


FIG. 84

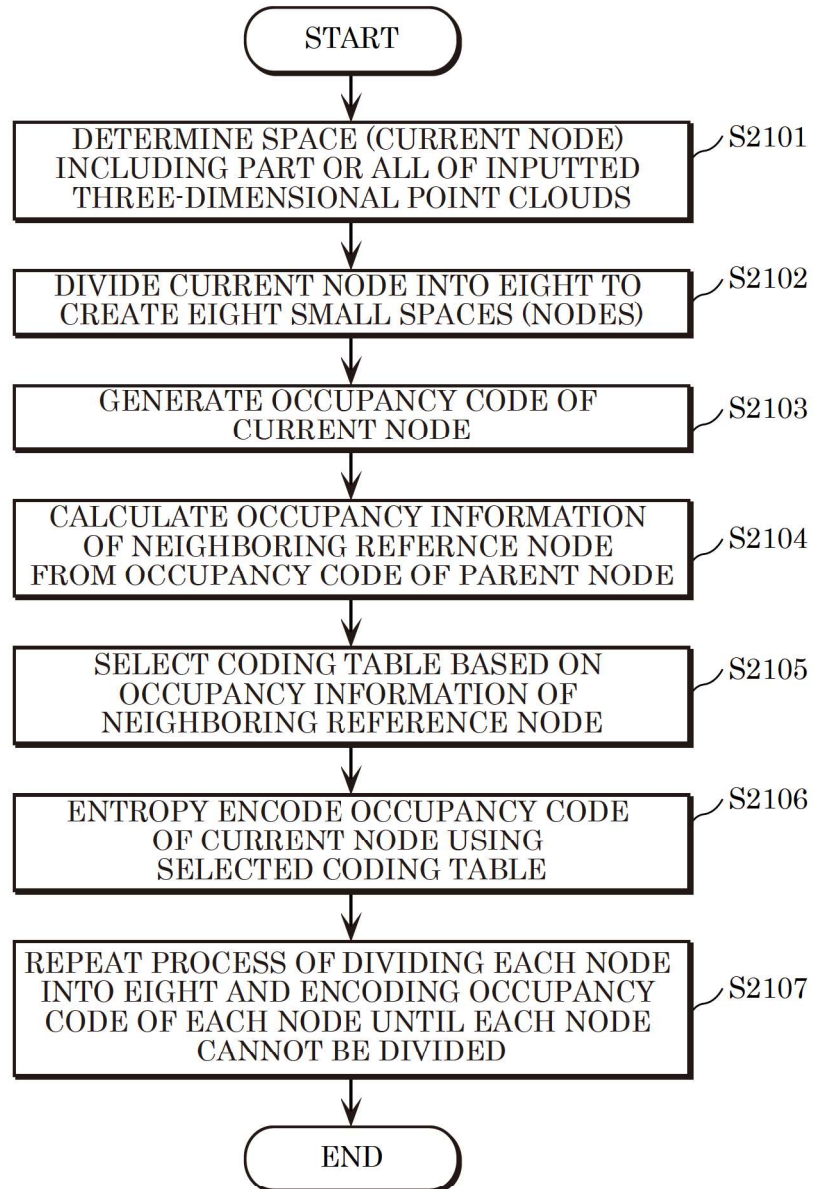


FIG. 85

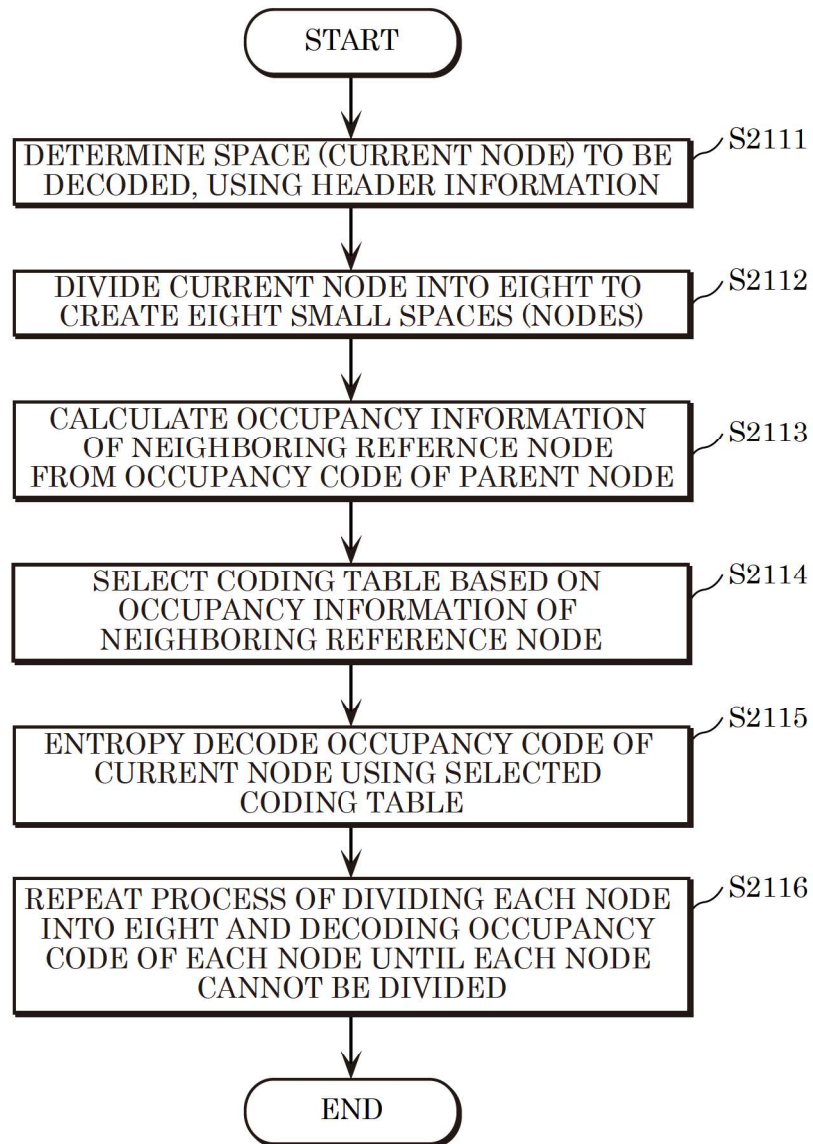


FIG. 86

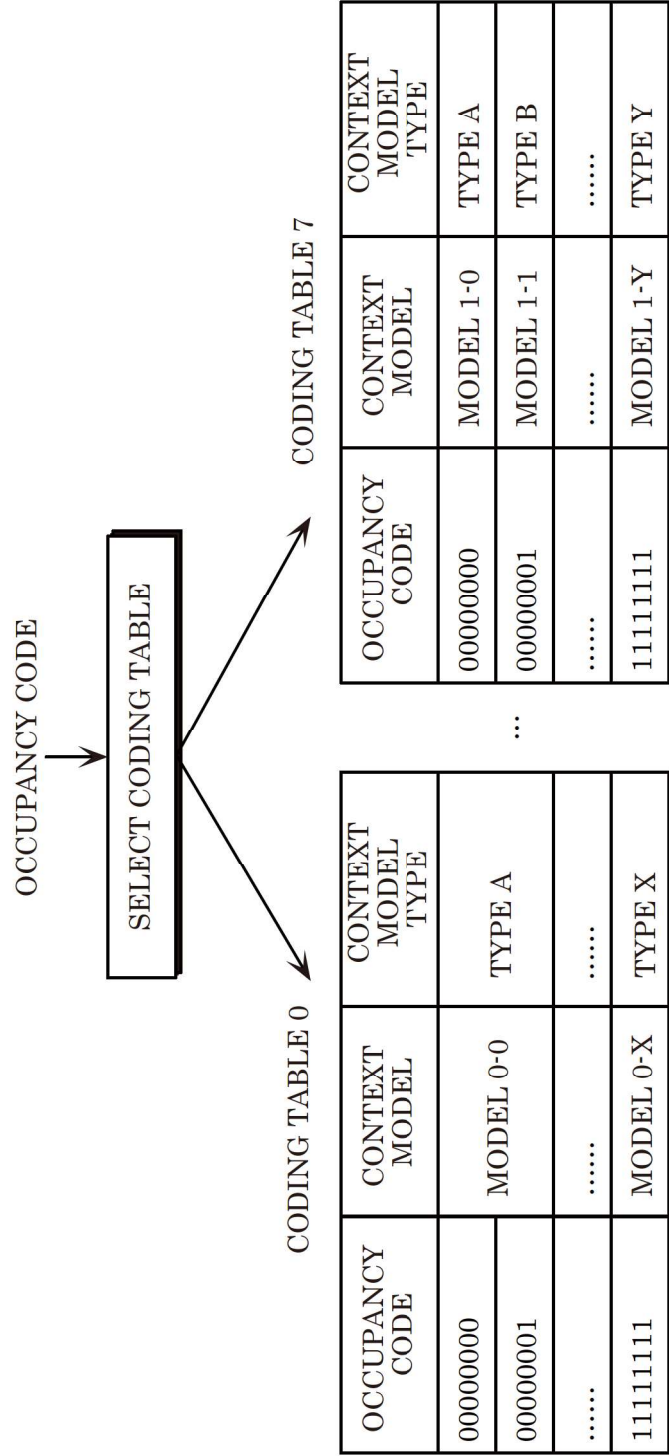


FIG. 87

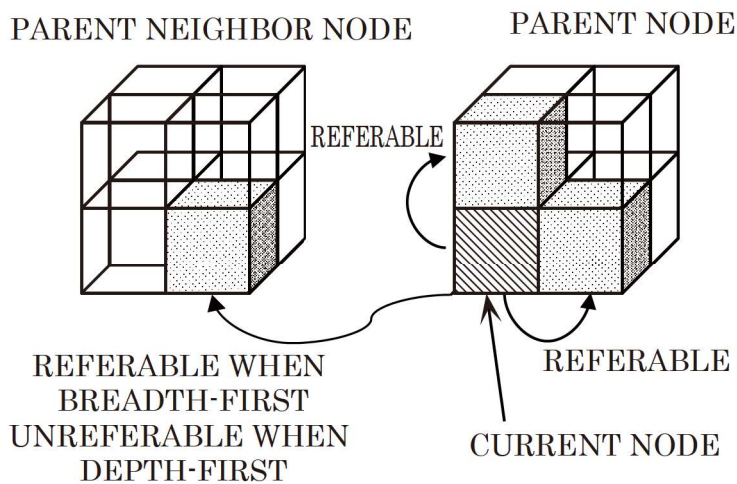


FIG. 88

```
pc_header 0 {
...
octree_scan_order
...
}
```

FIG. 89

```
pc_header 0 {
...
limit_refer_flag
...
}
```

FIG. 90

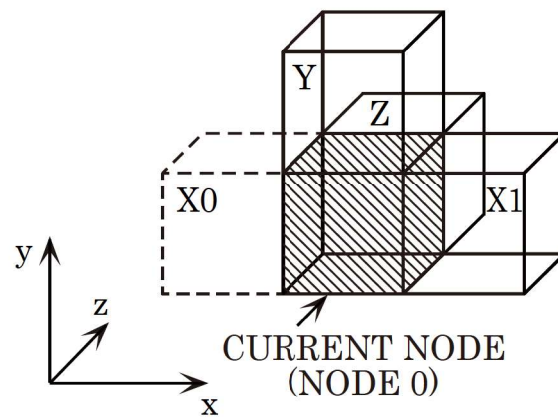


FIG. 91

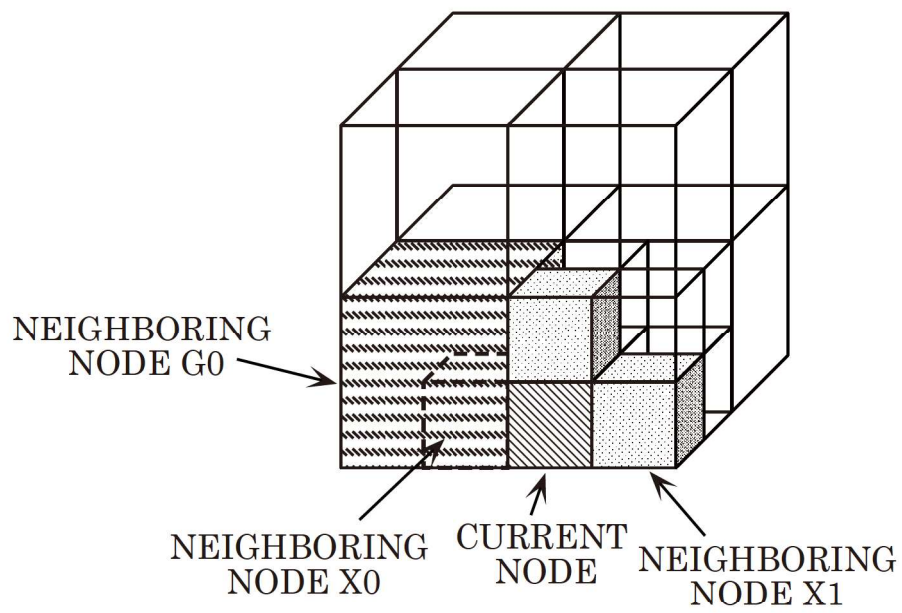


FIG. 92

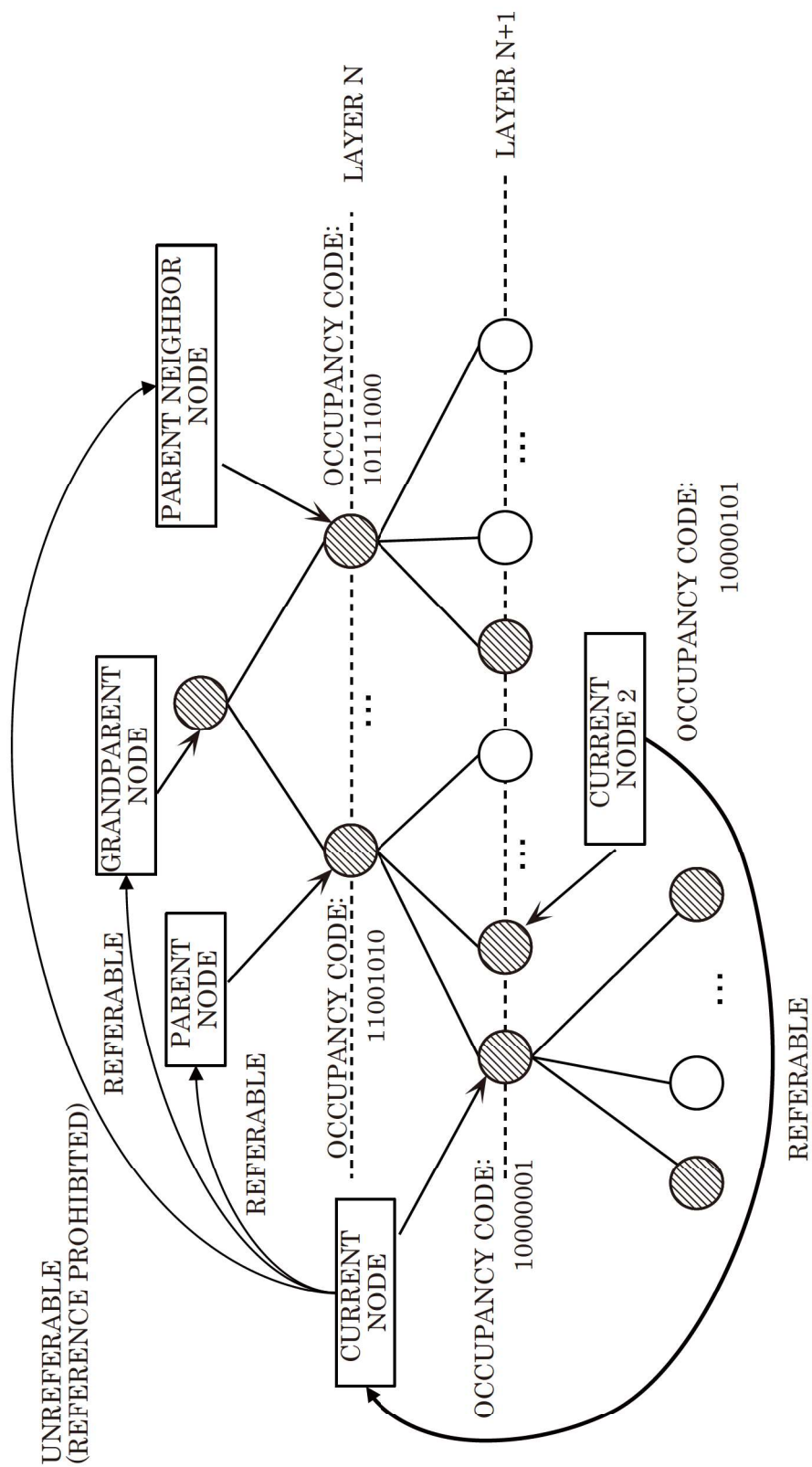


FIG. 93

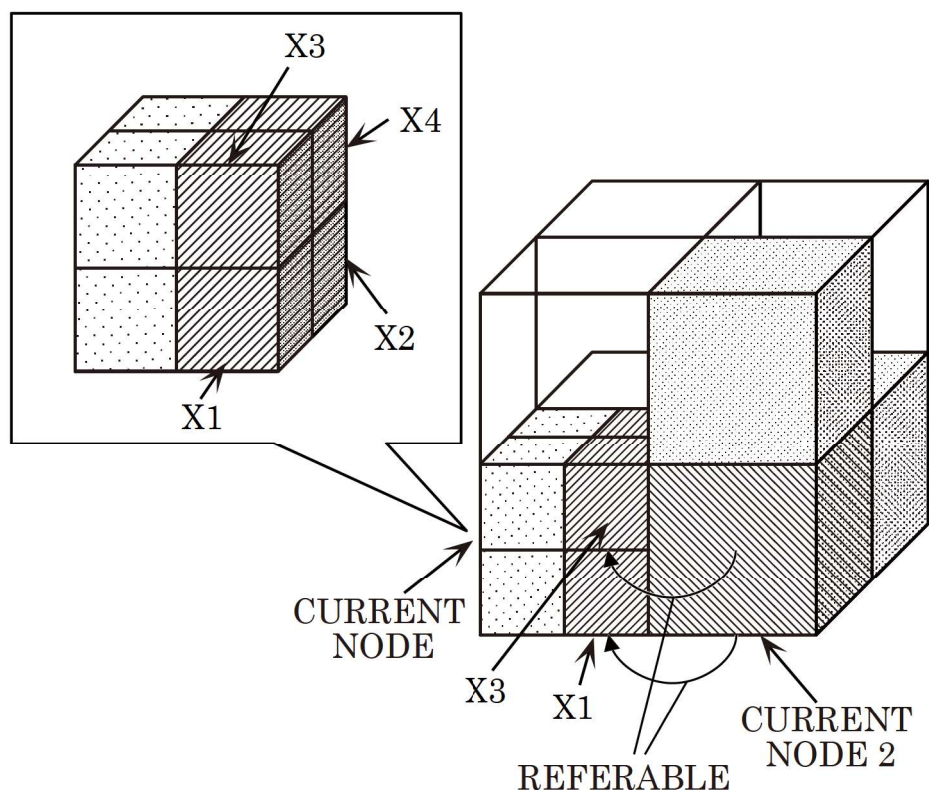


FIG. 94

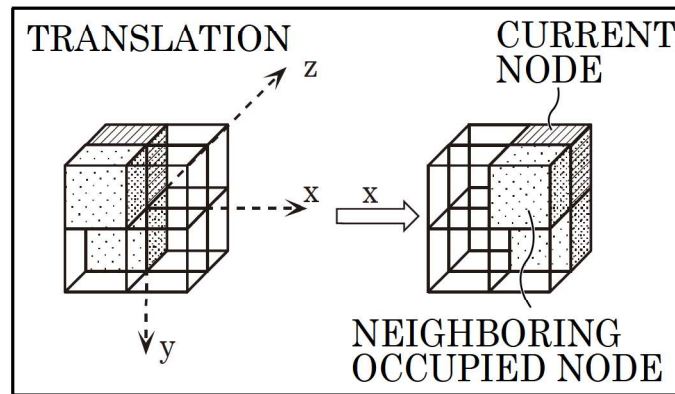


FIG. 95

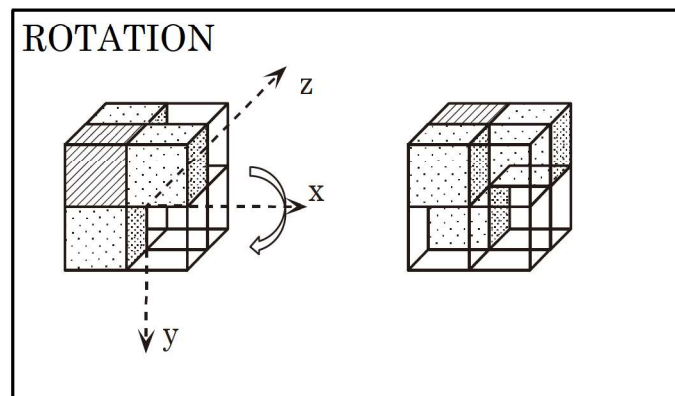


FIG. 96

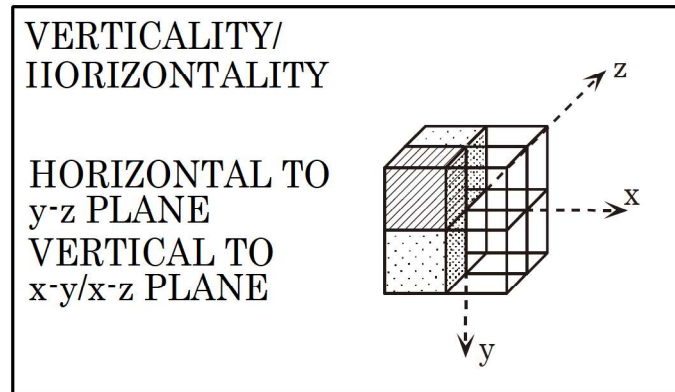


FIG. 97

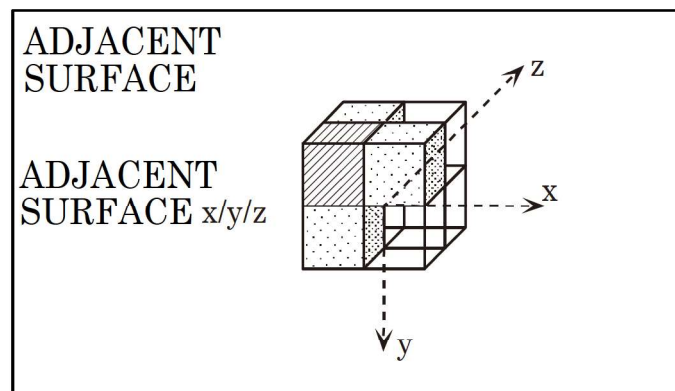


FIG. 98

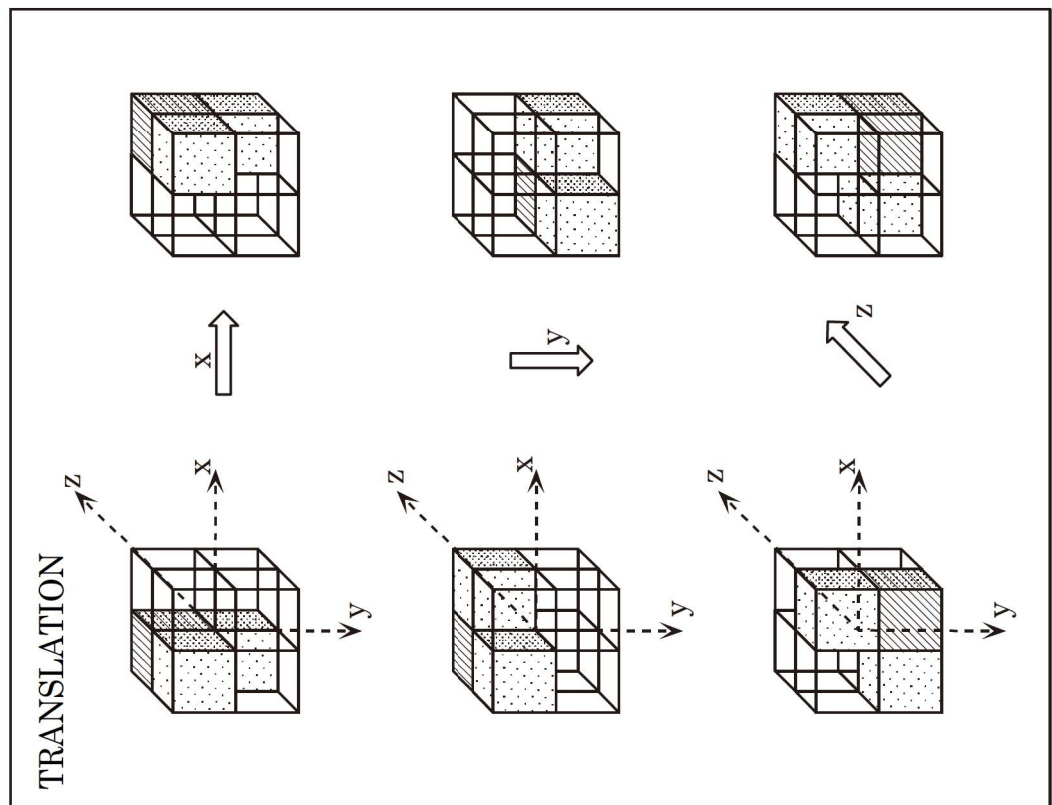


FIG. 99

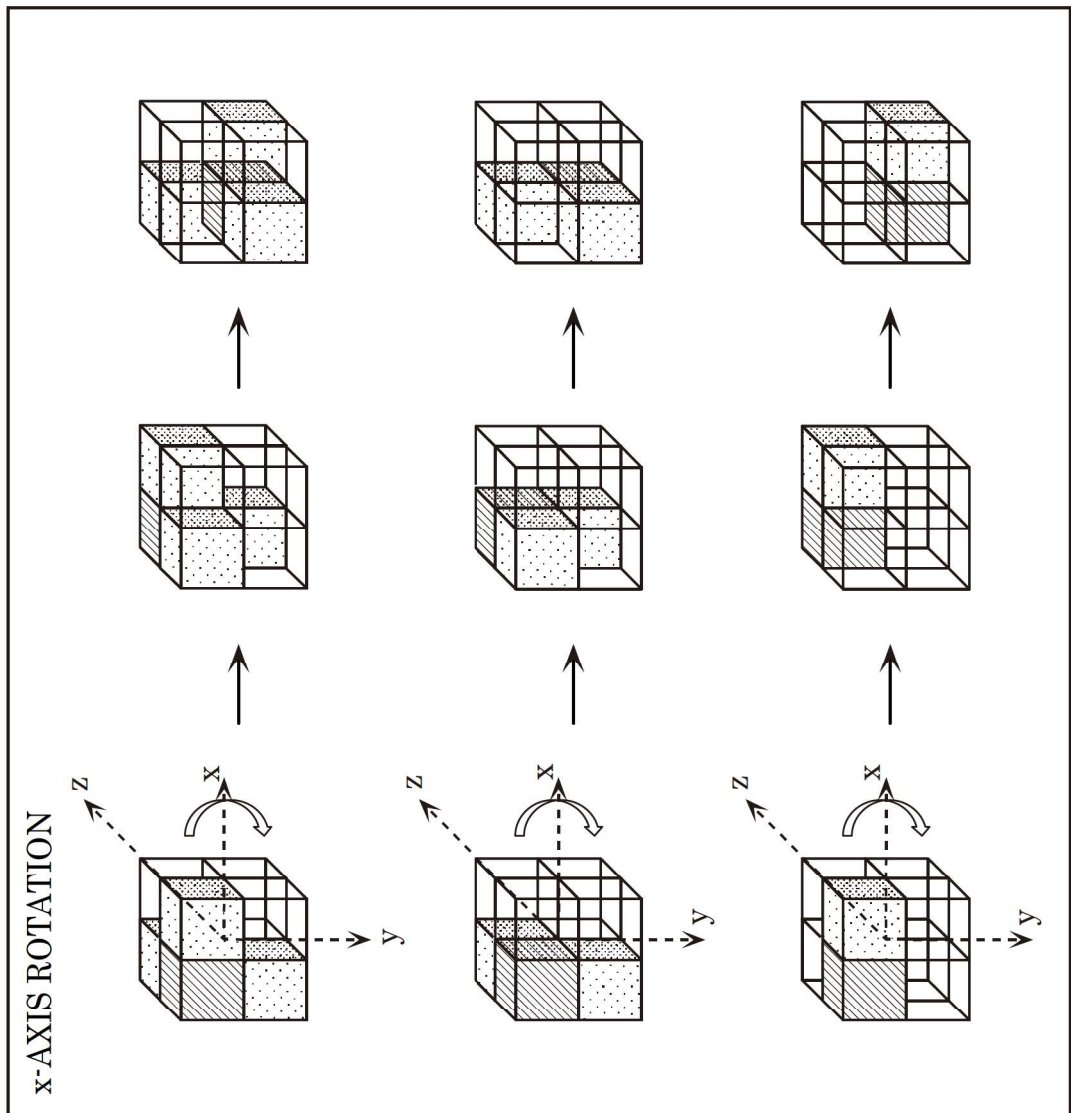


FIG. 100

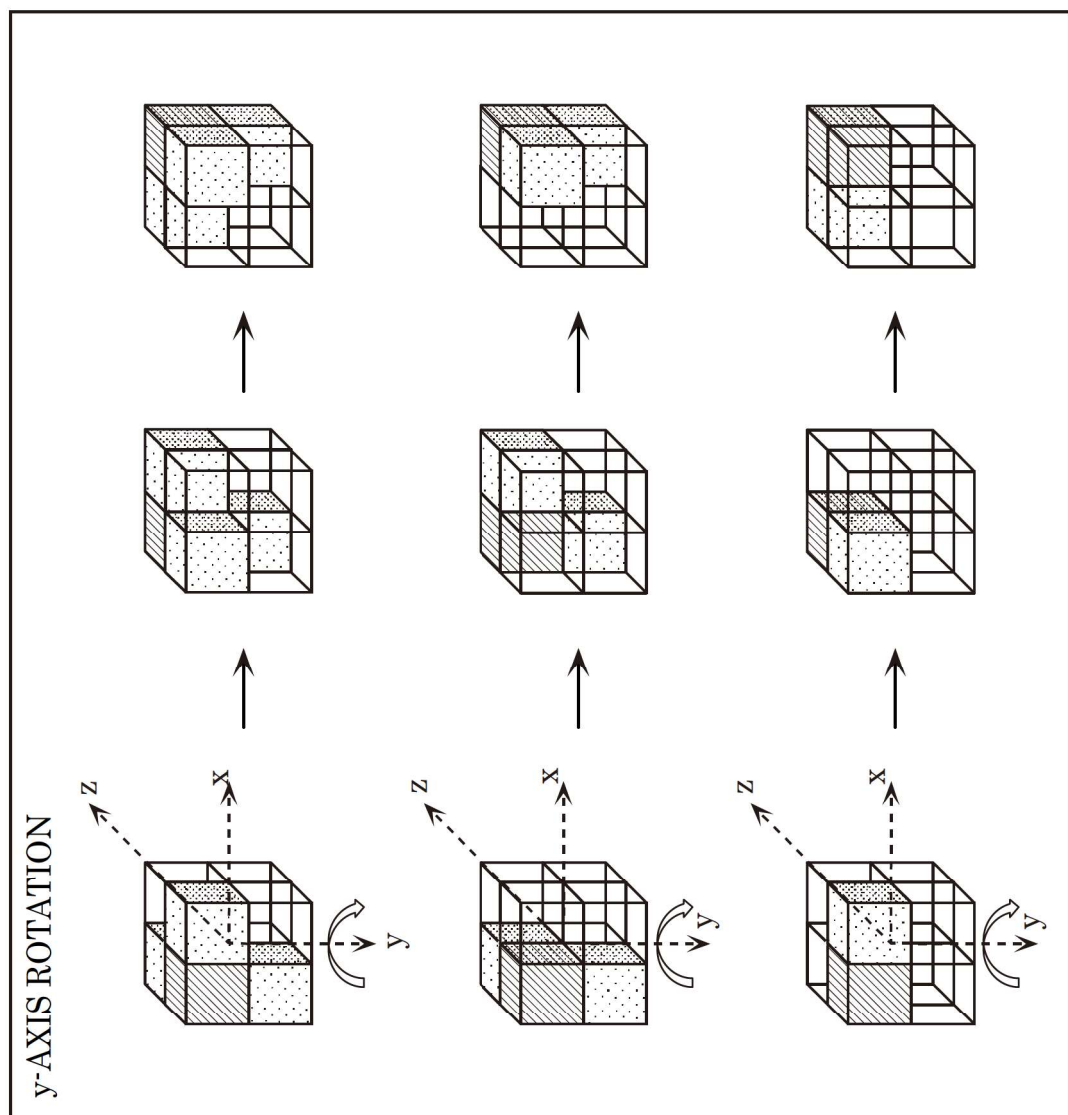


FIG. 101

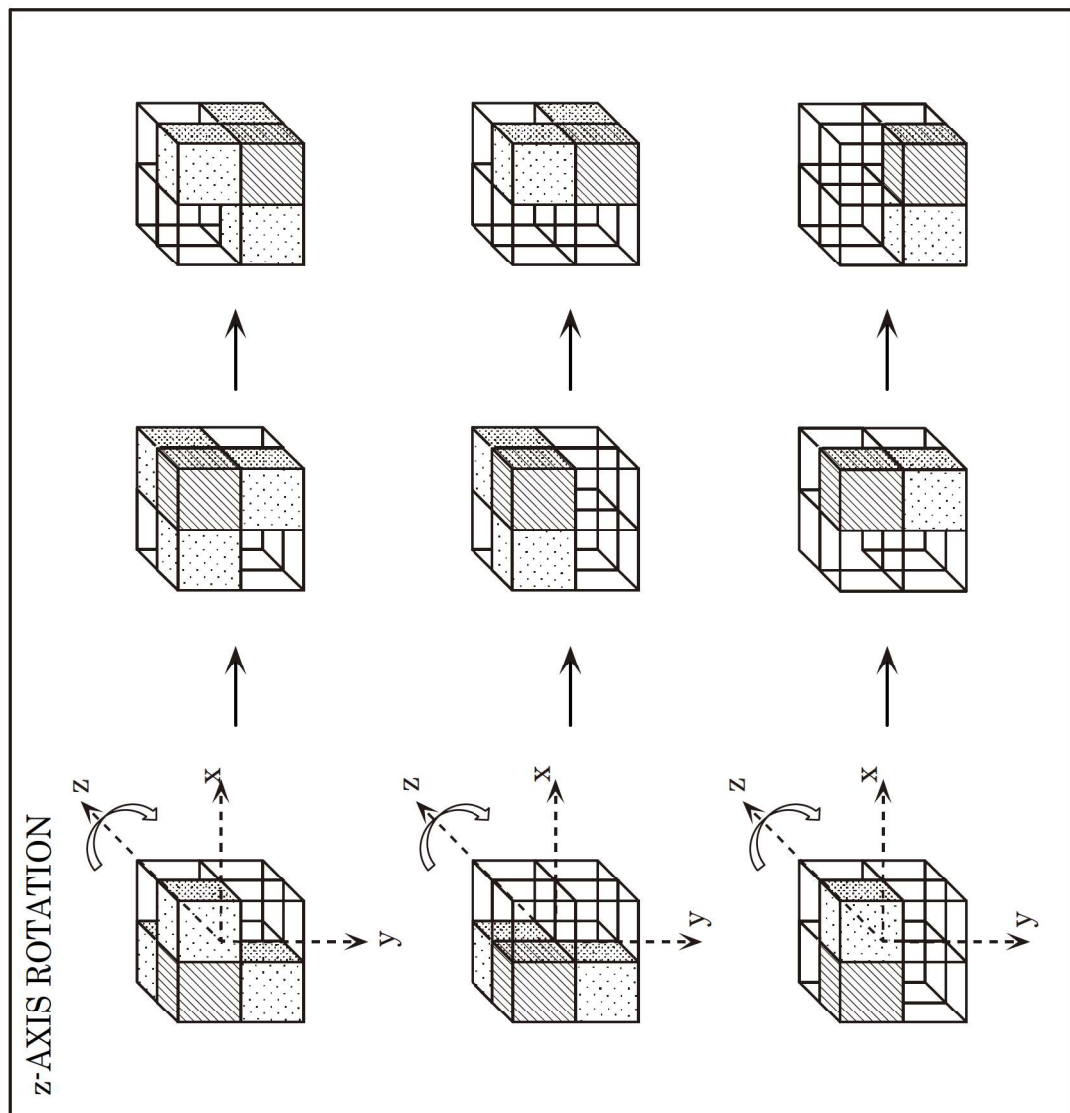


FIG. 102

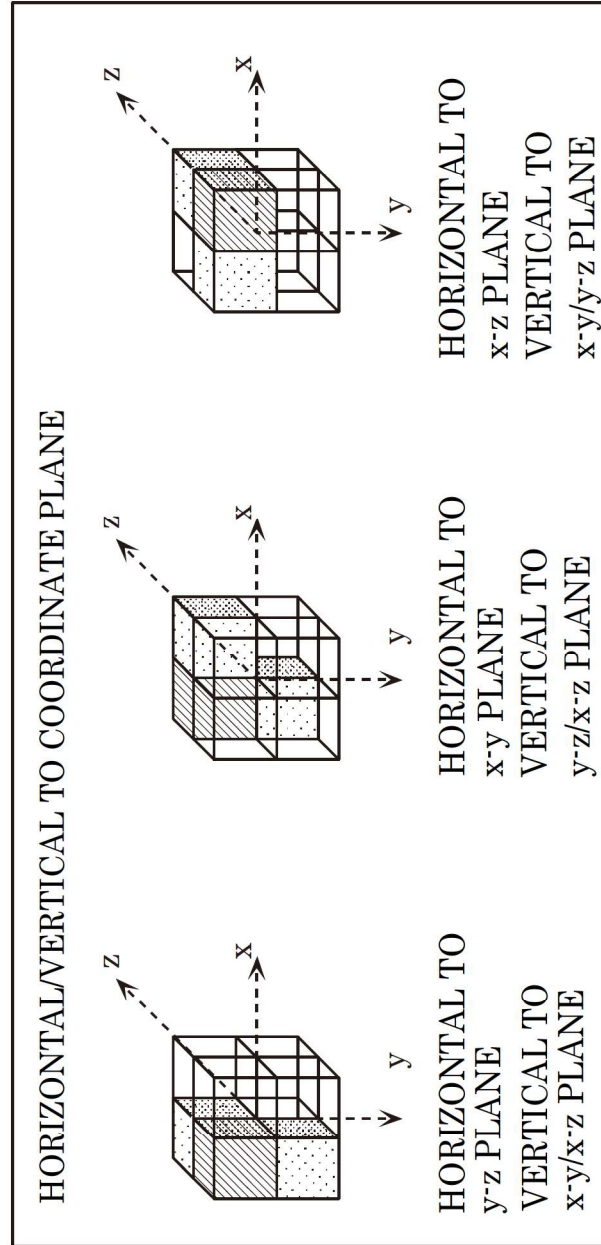


FIG. 103

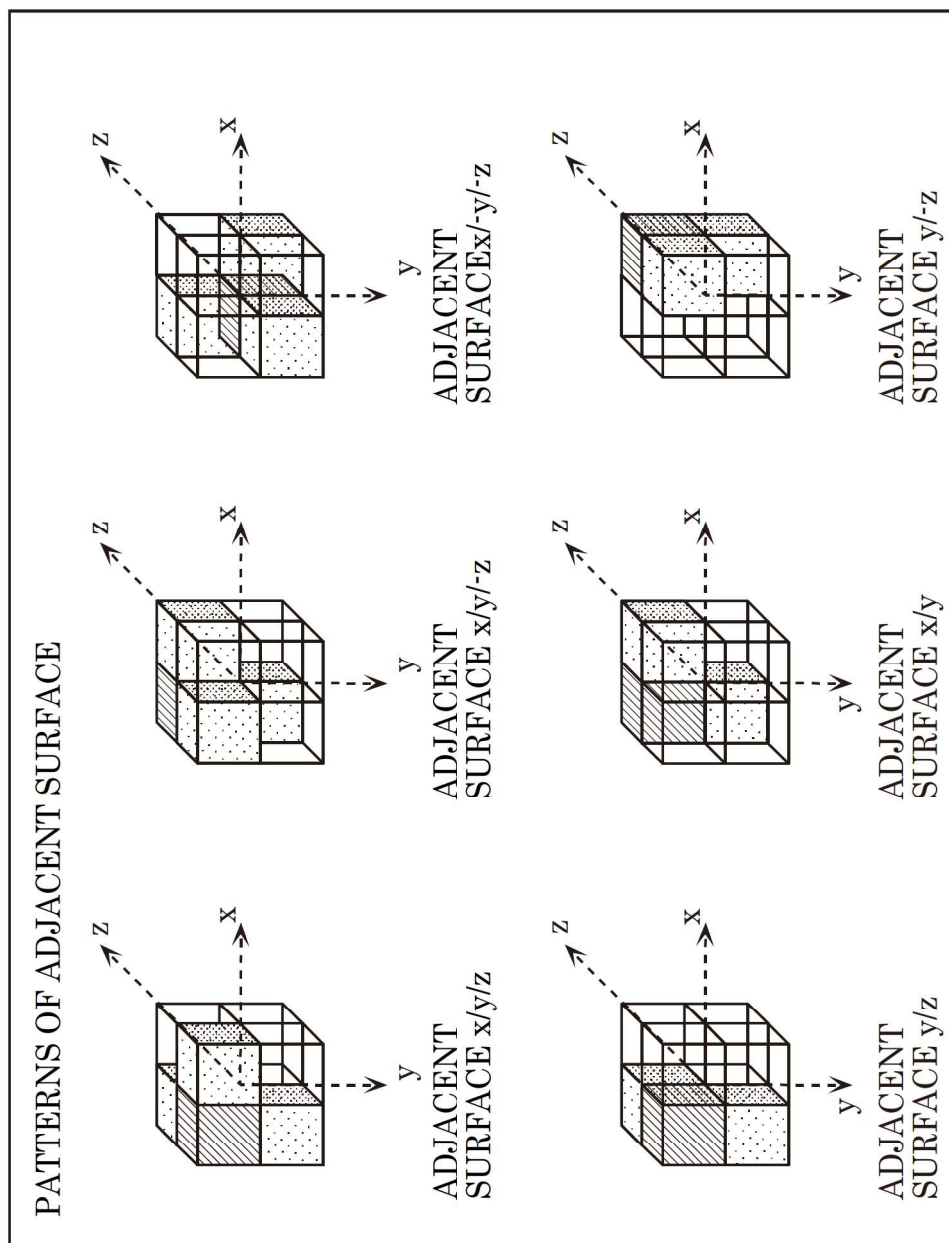


FIG. 104

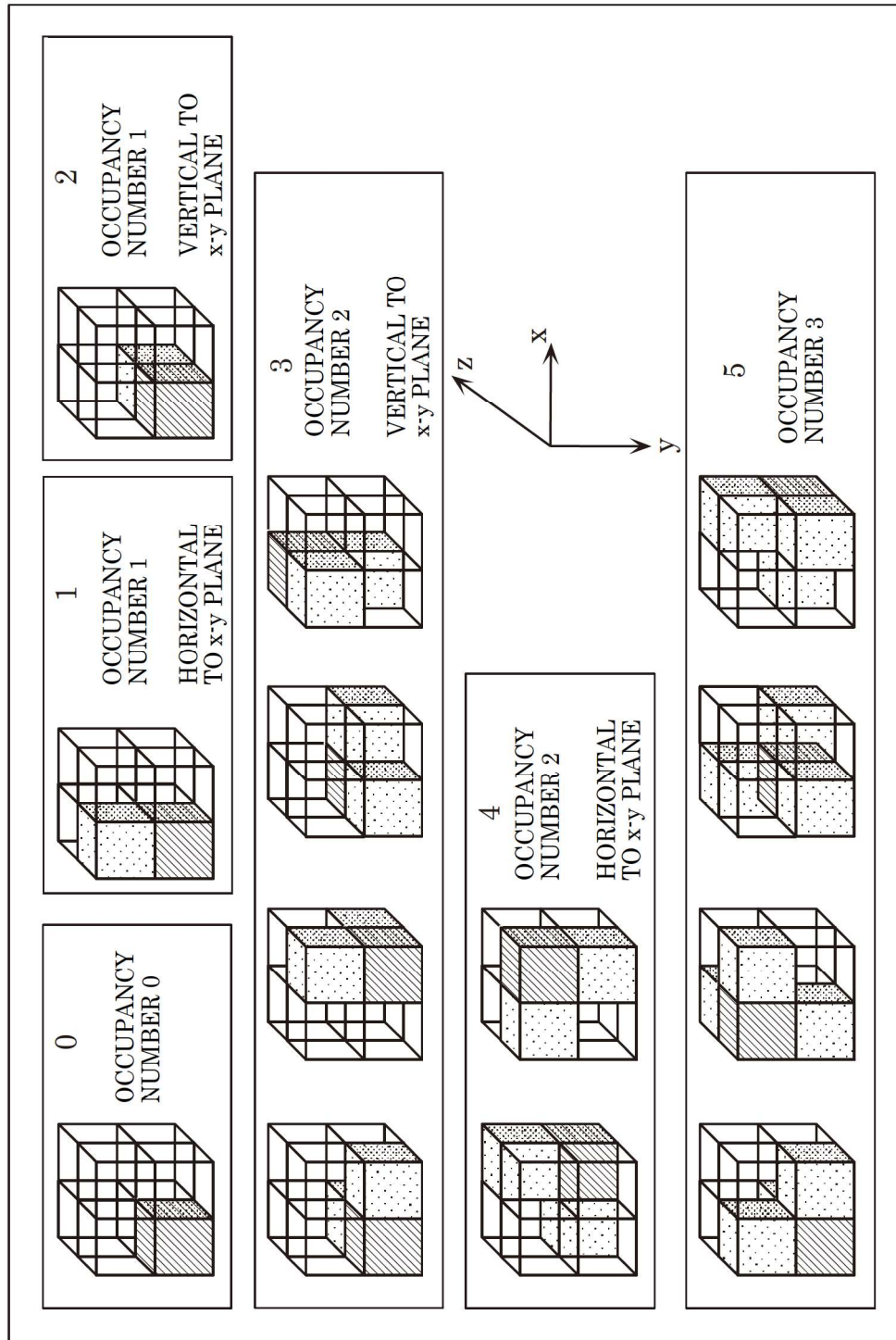


FIG. 105

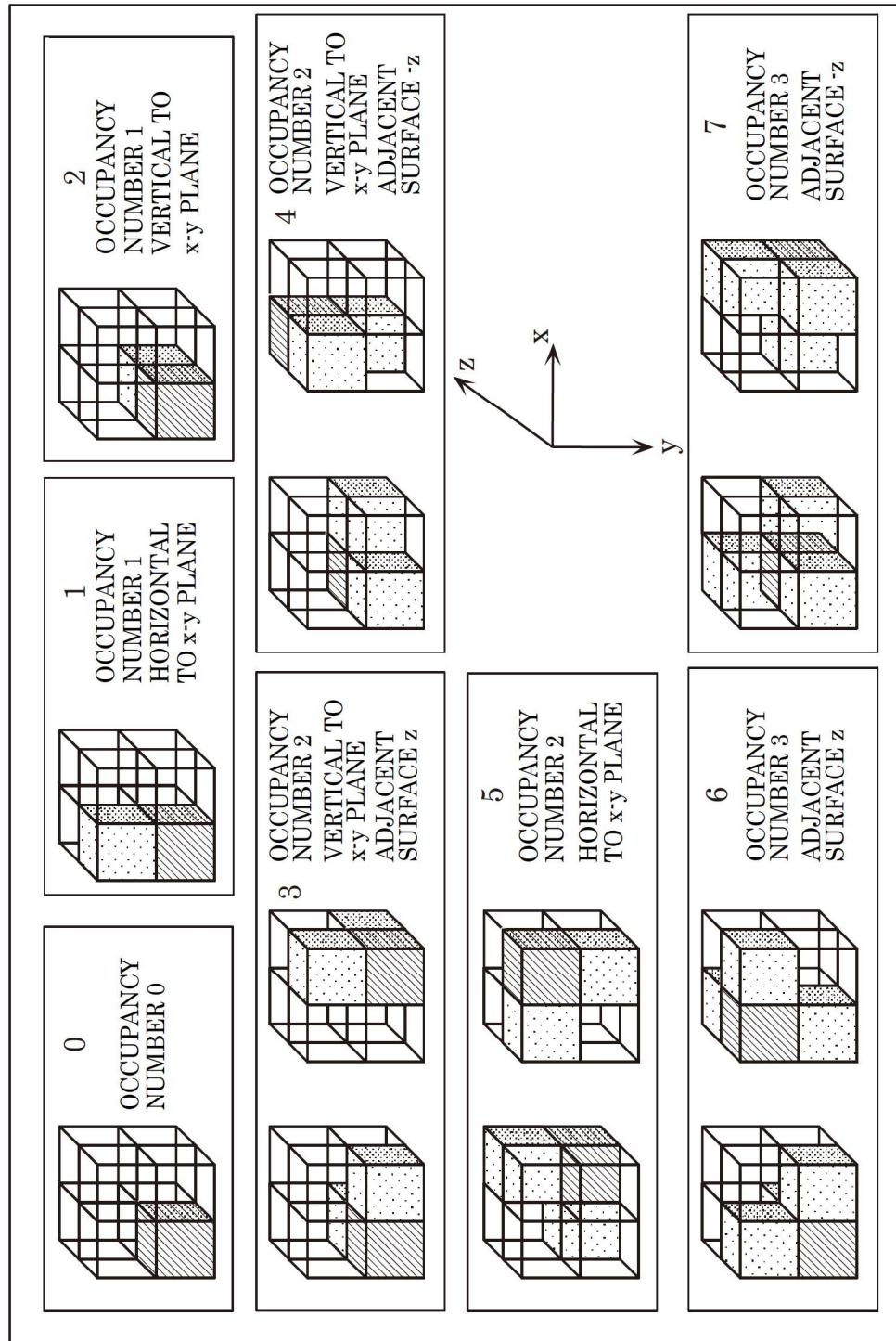


FIG. 106

NEIGHBOR OCCUPANCY PATTERN	CODING TABLE INDEX
PATTERN 0	TABLE 0
PATTERN 1	TABLE 1
PATTERN 2	TABLE 1
PATTERN 3	TABLE 0
PATTERN 4	TABLE 2
PATTERN 5	TABLE 0
PATTERN 6	TABLE 1
PATTERN 7	TABLE 2
...	...

FIG. 107

CODING TABLE INDEX 1 (FOR EIGHT TABLES)	CODING TABLE INDEX 2 (FOR SIX TABLES)
TABLE 0	TABLE 0
TABLE 1	TABLE 1
TABLE 2	TABLE 2
TABLE 3	TABLE 3
TABLE 4	TABLE 4
TABLE 5	TABLE 4
TABLE 6	TABLE 5
TABLE 7	TABLE 5

FIG. 108

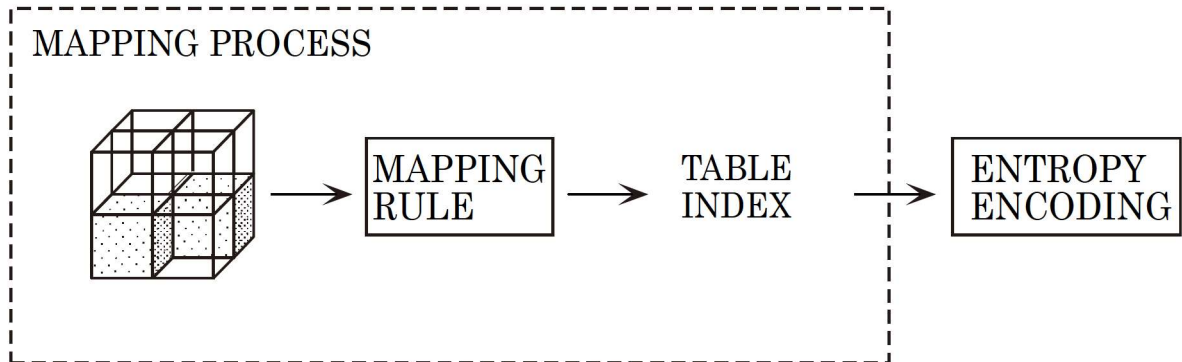


FIG. 109

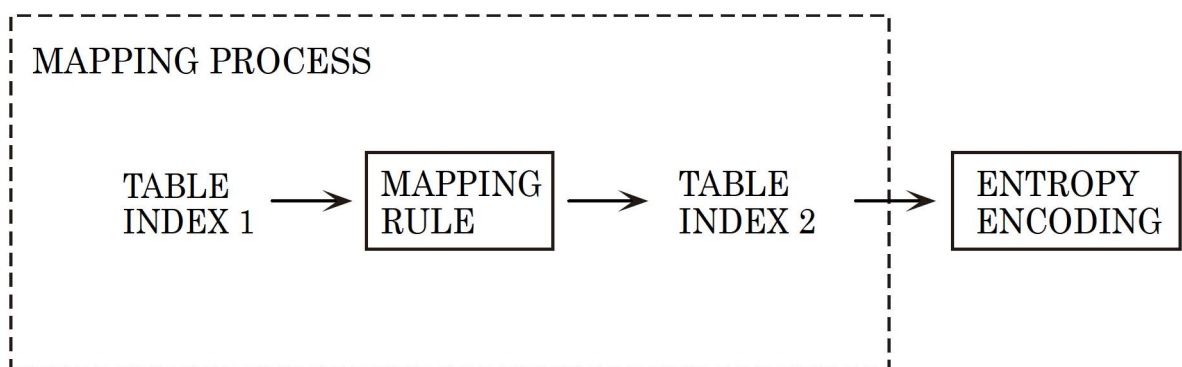


FIG. 110

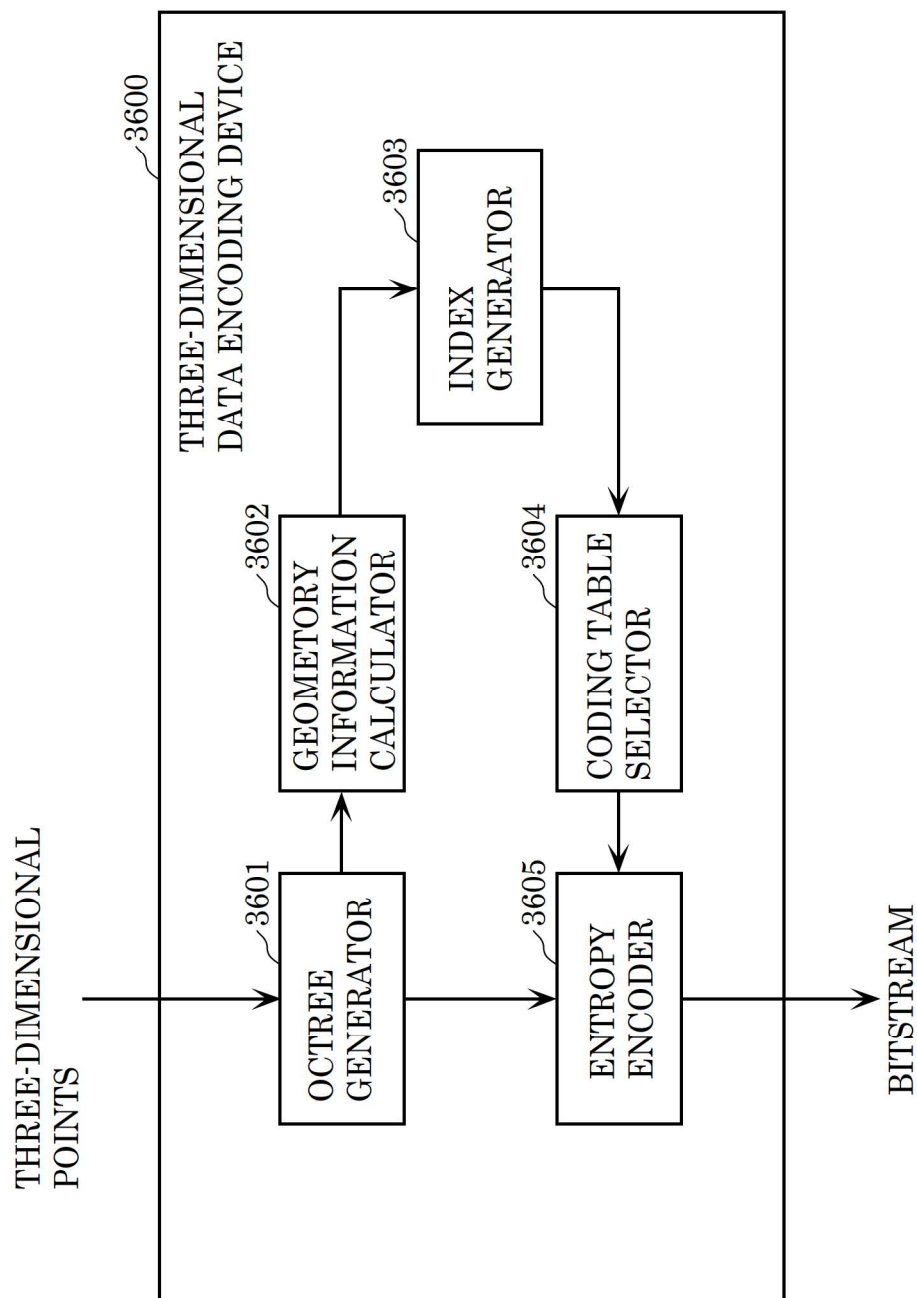


FIG. 111

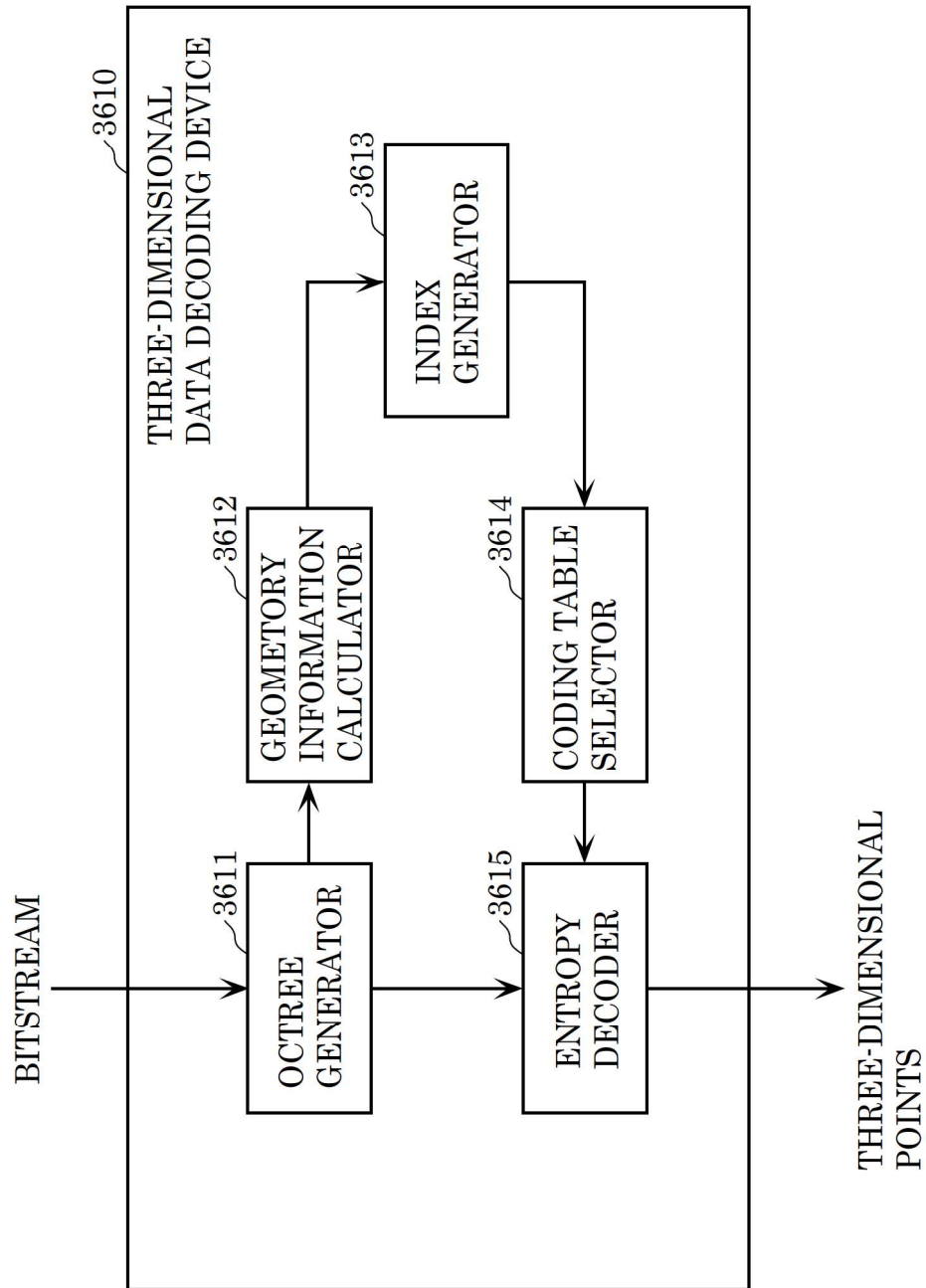


FIG. 112

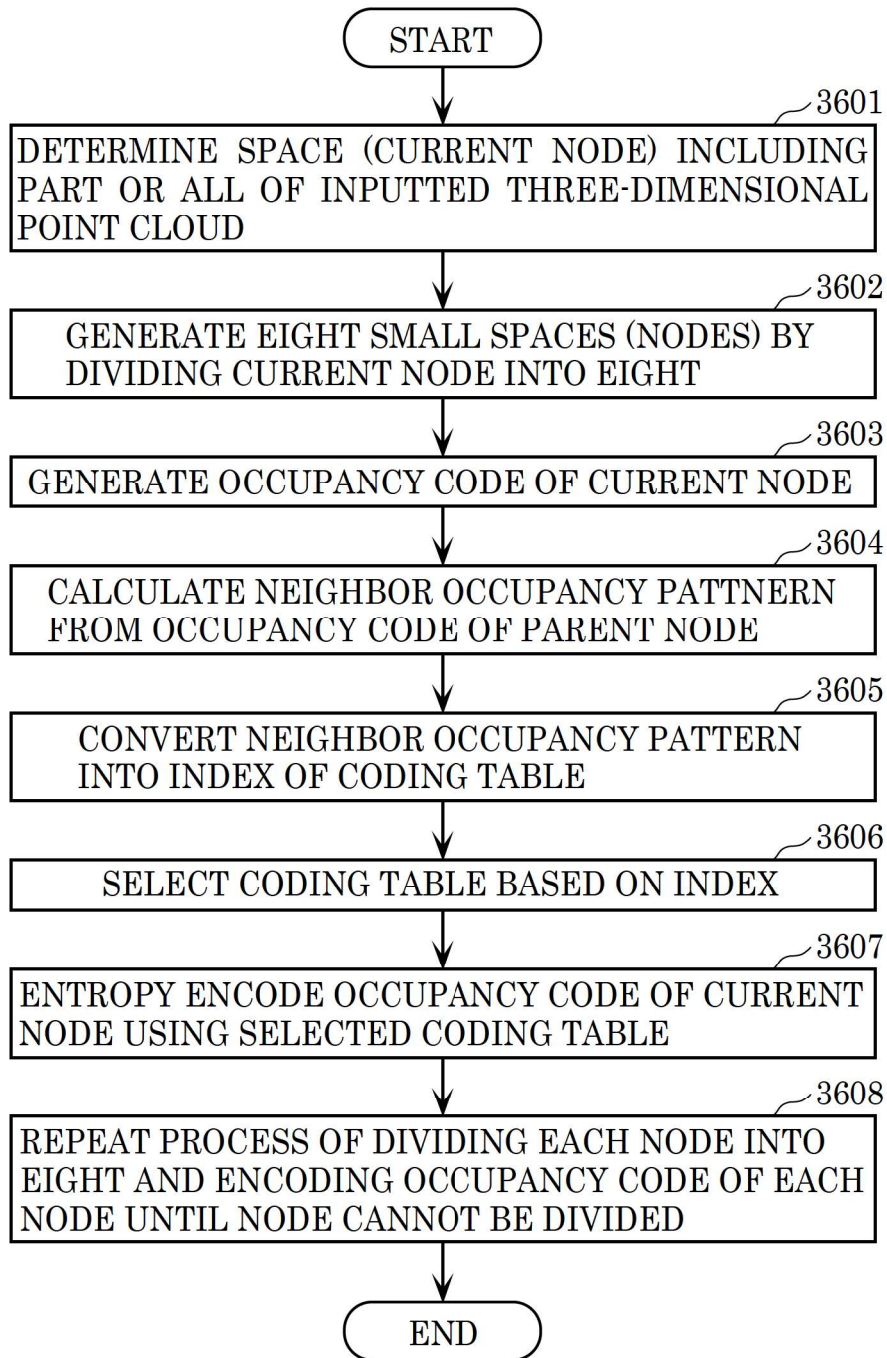


FIG. 113

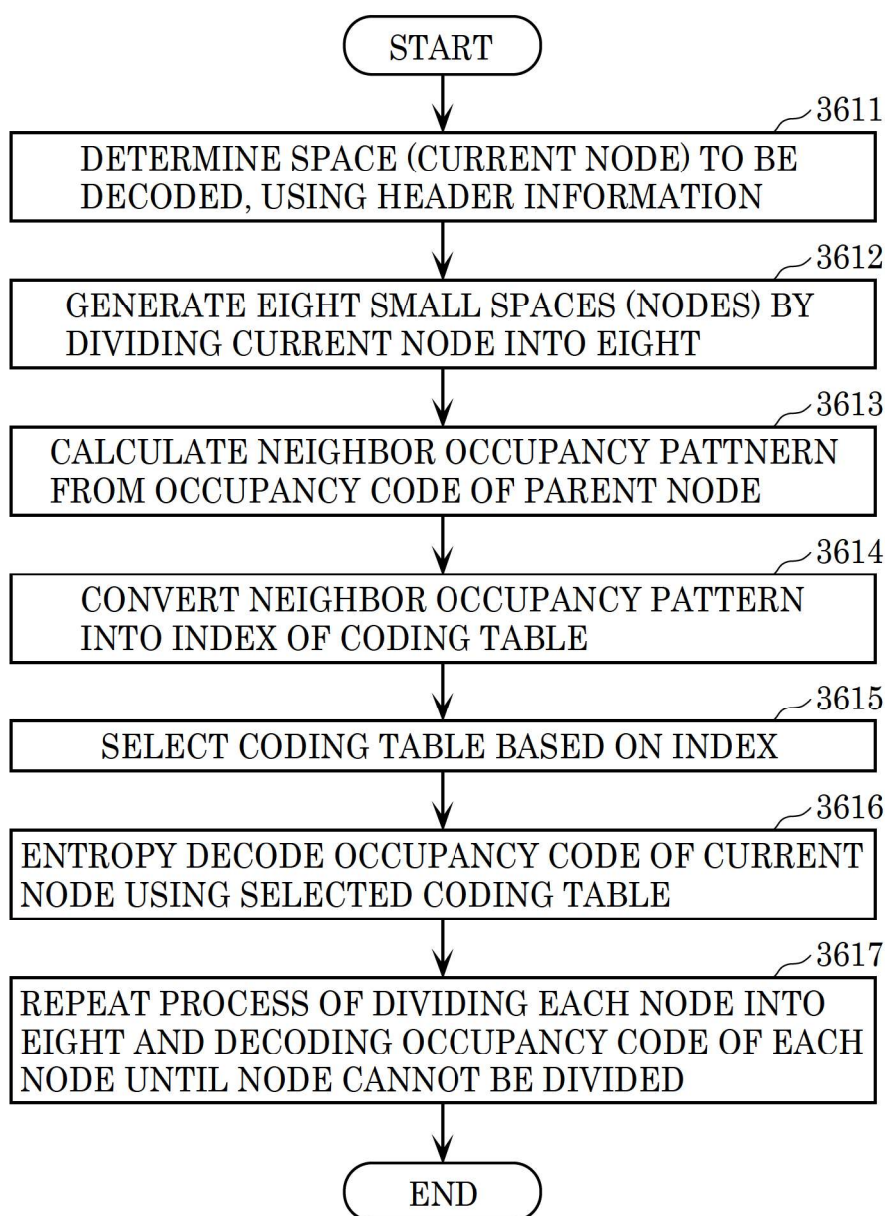


FIG. 114

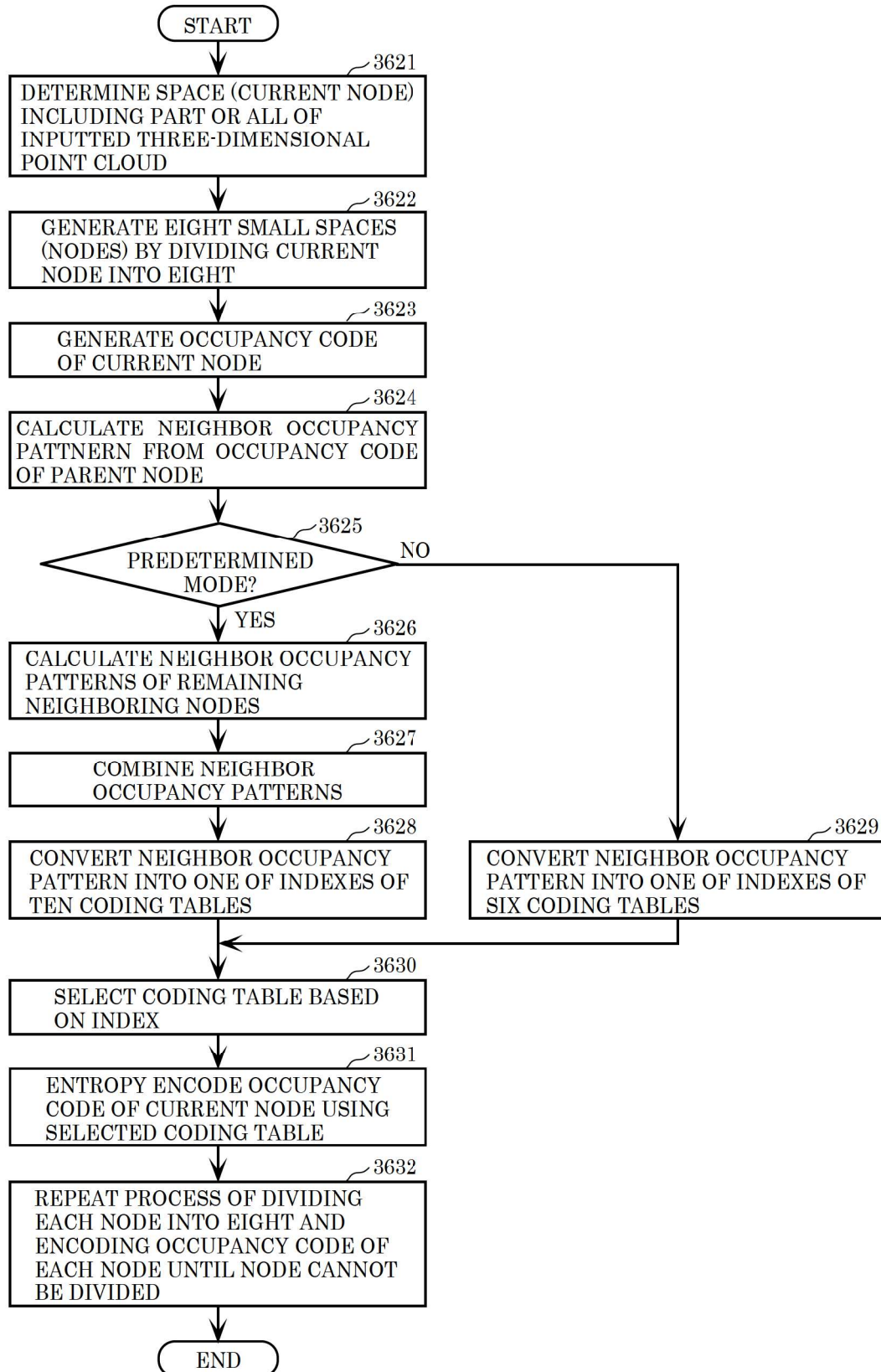


FIG. 115

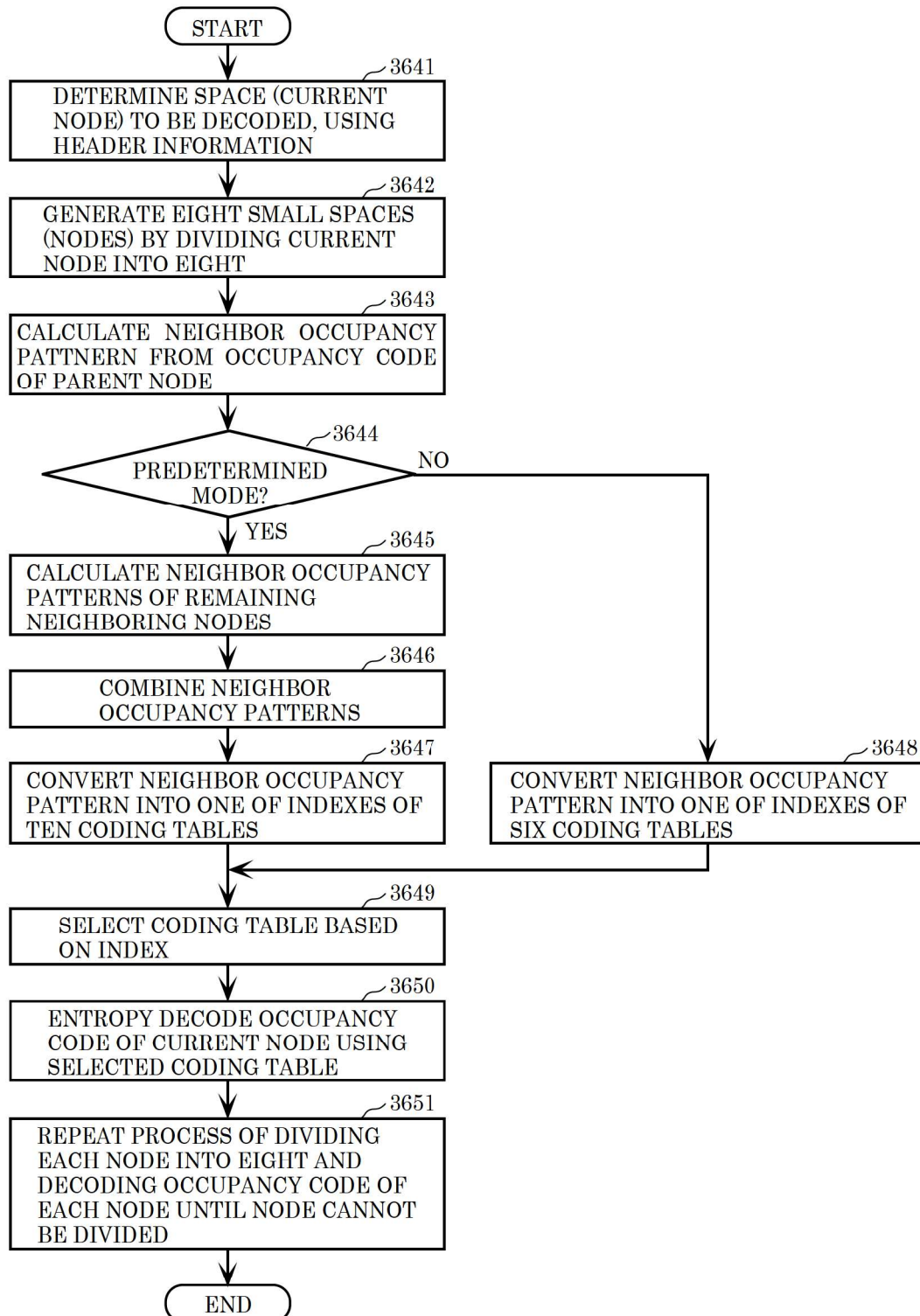


FIG. 116

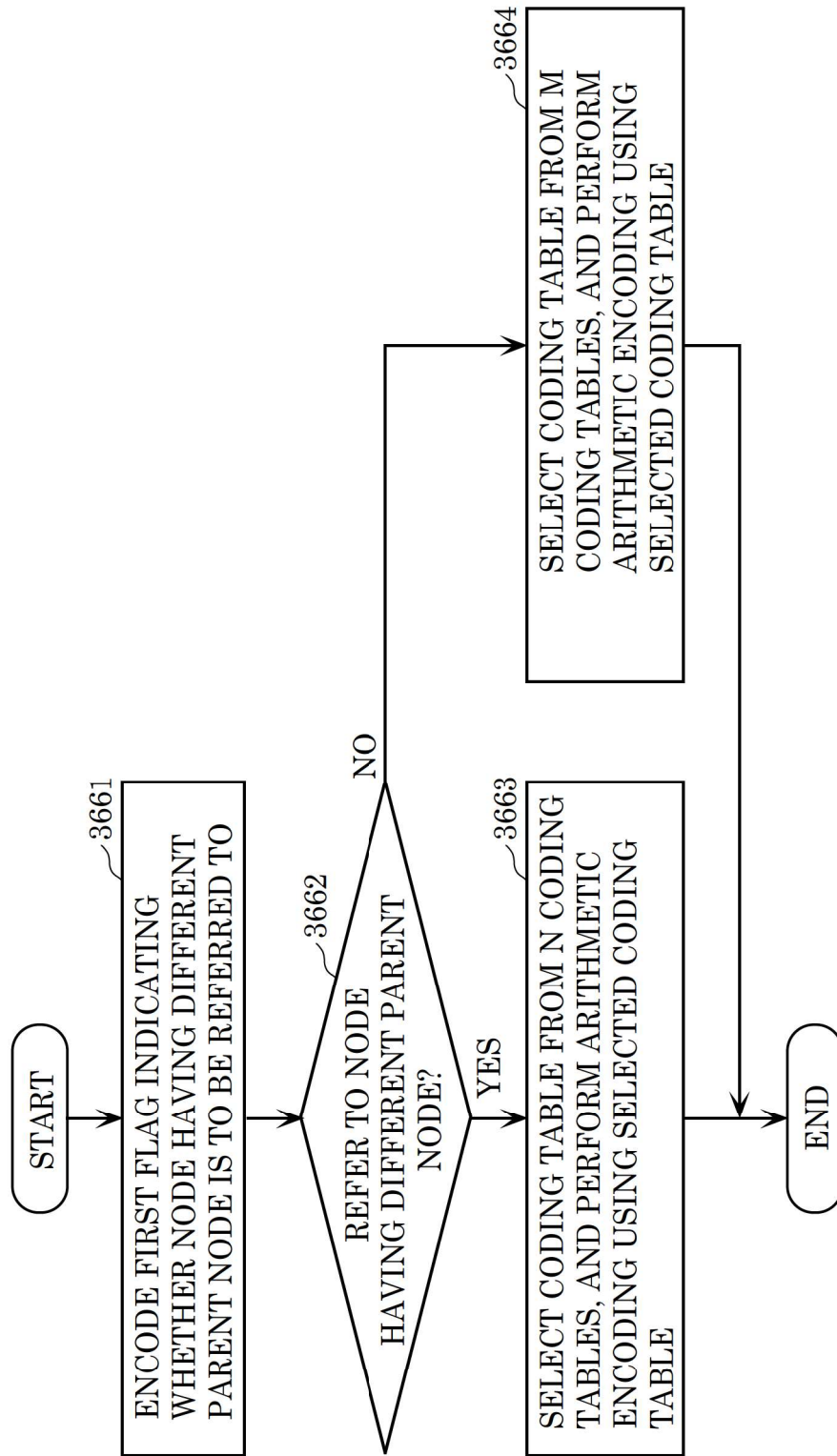


FIG. 117

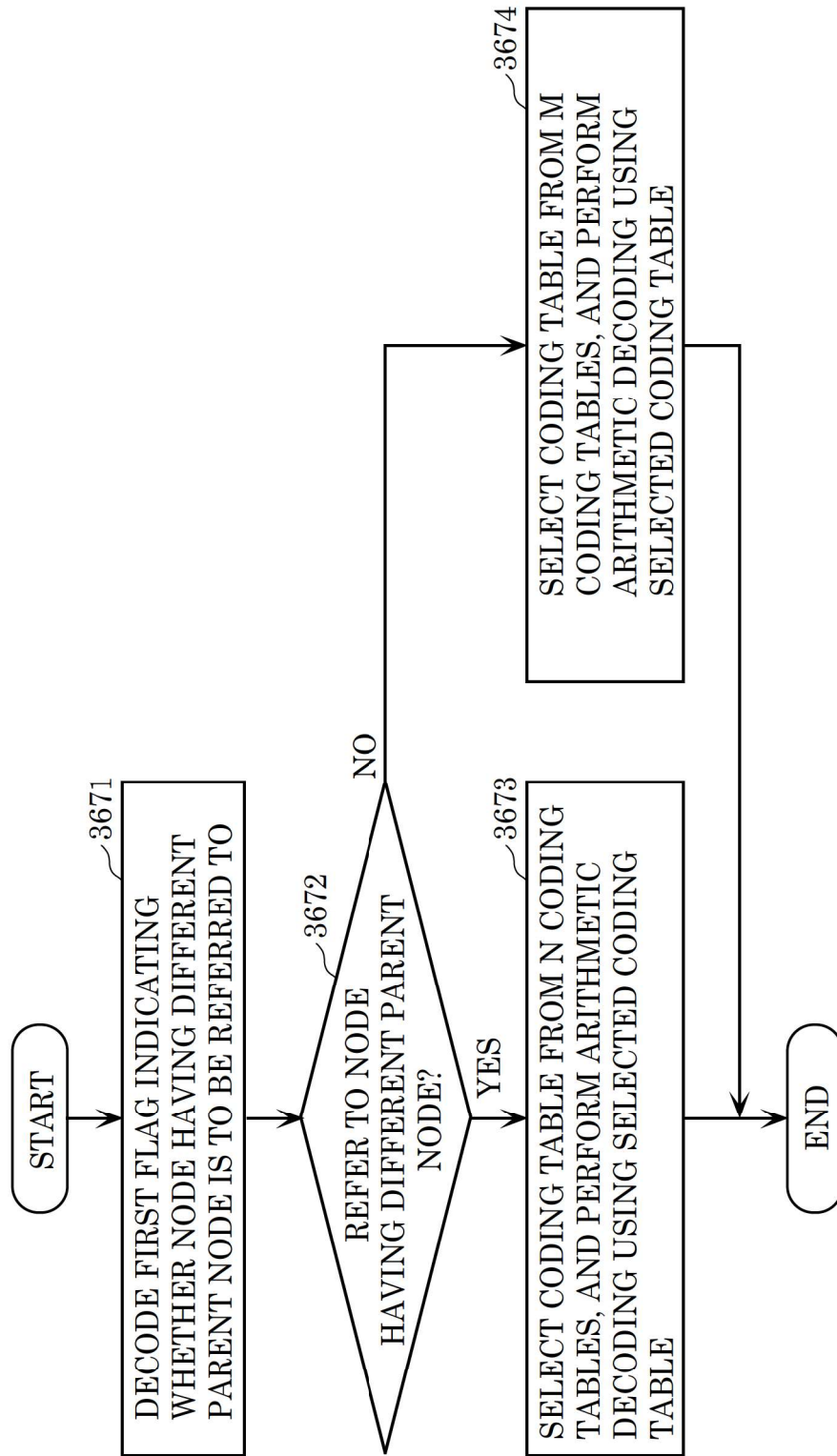


FIG. 118

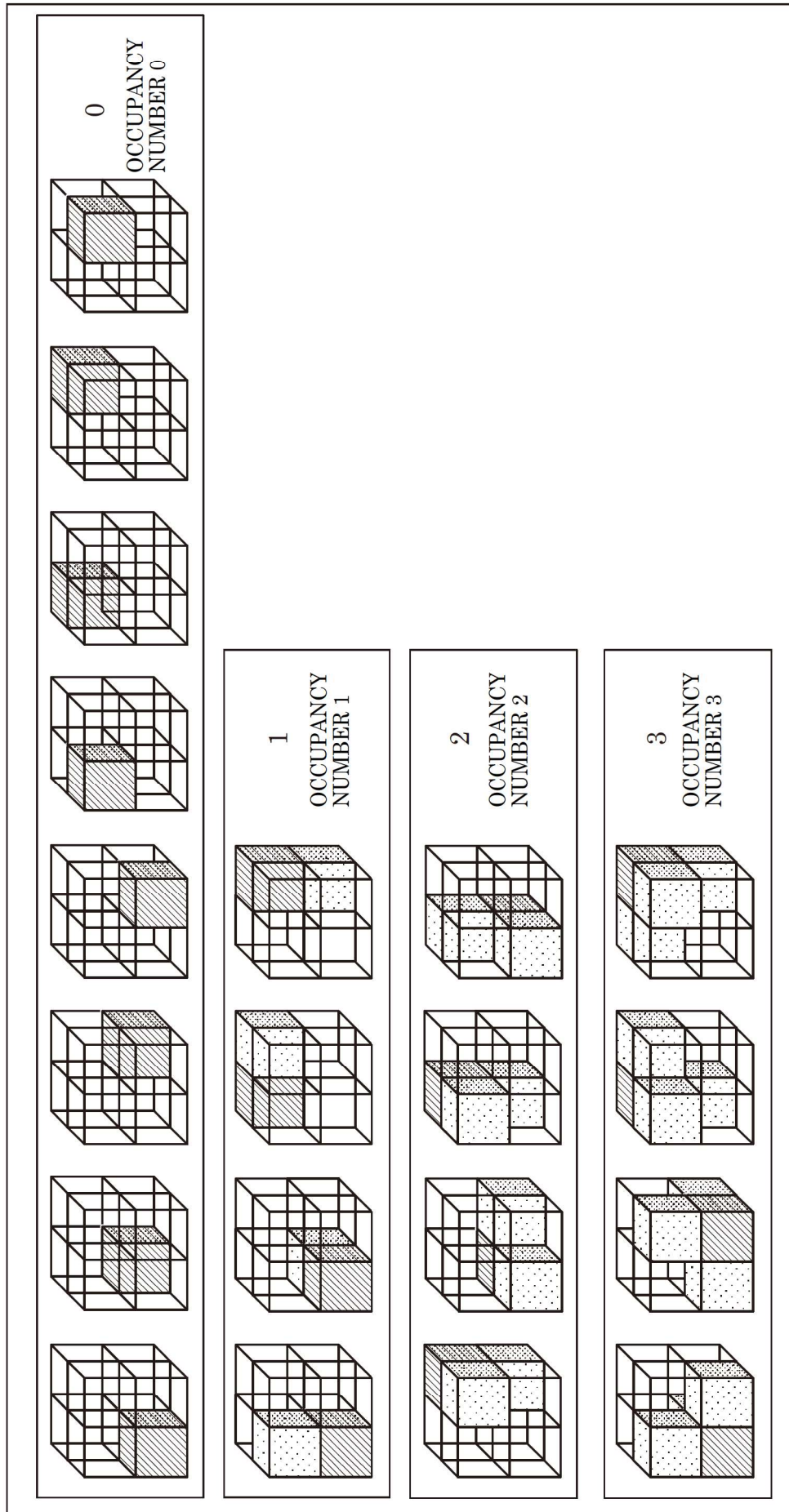


FIG. 119

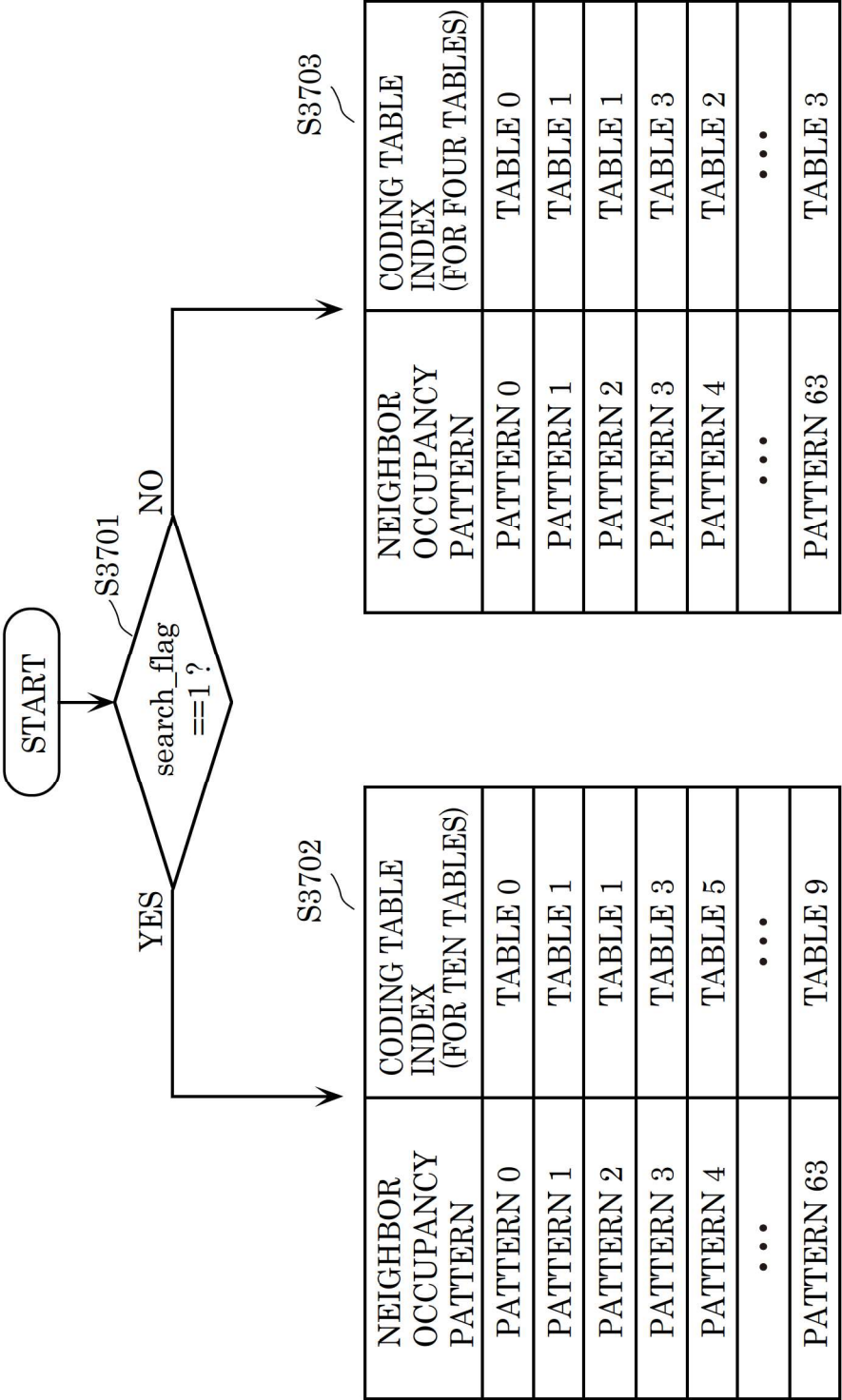


FIG. 120

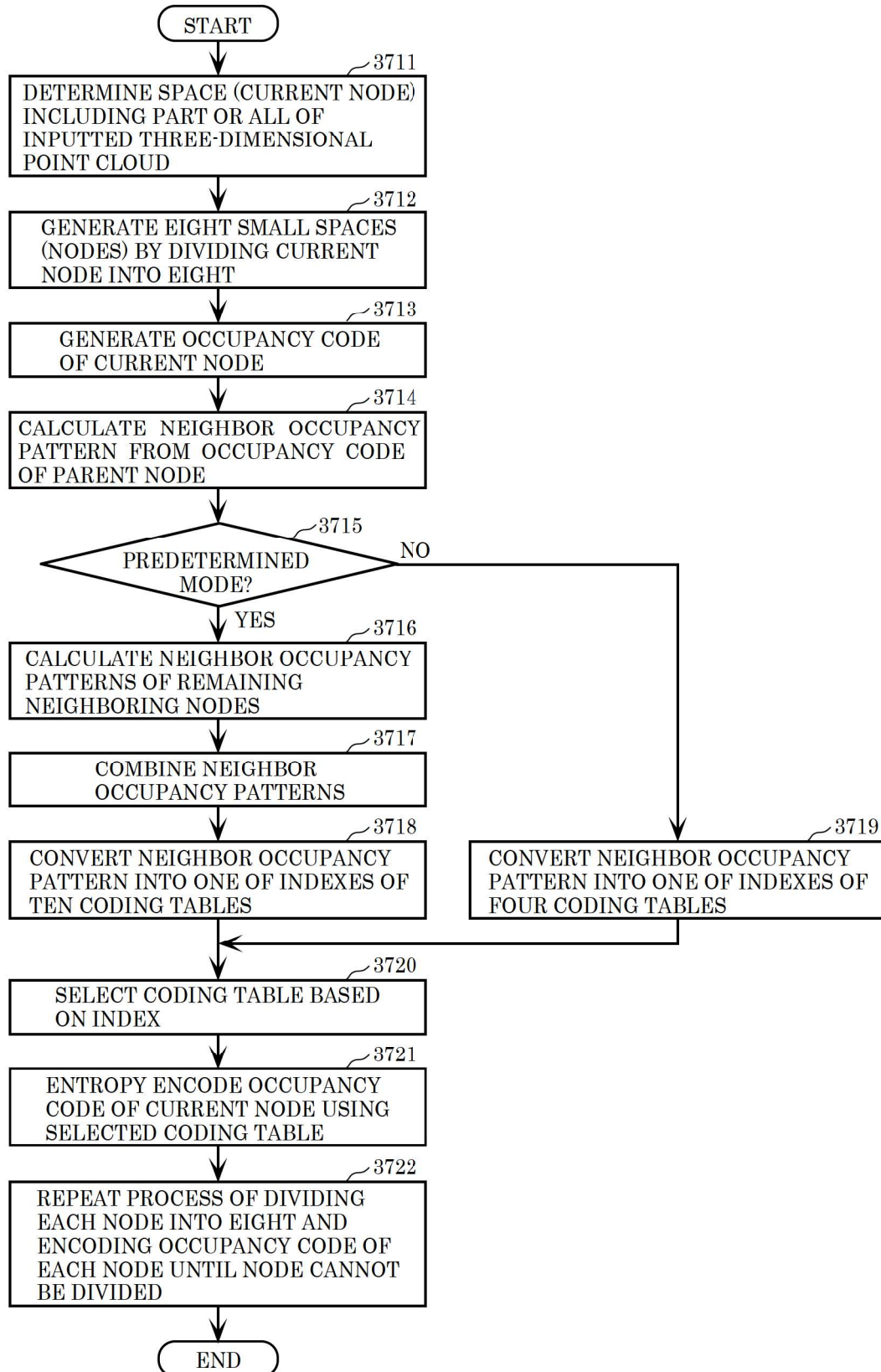


FIG. 121

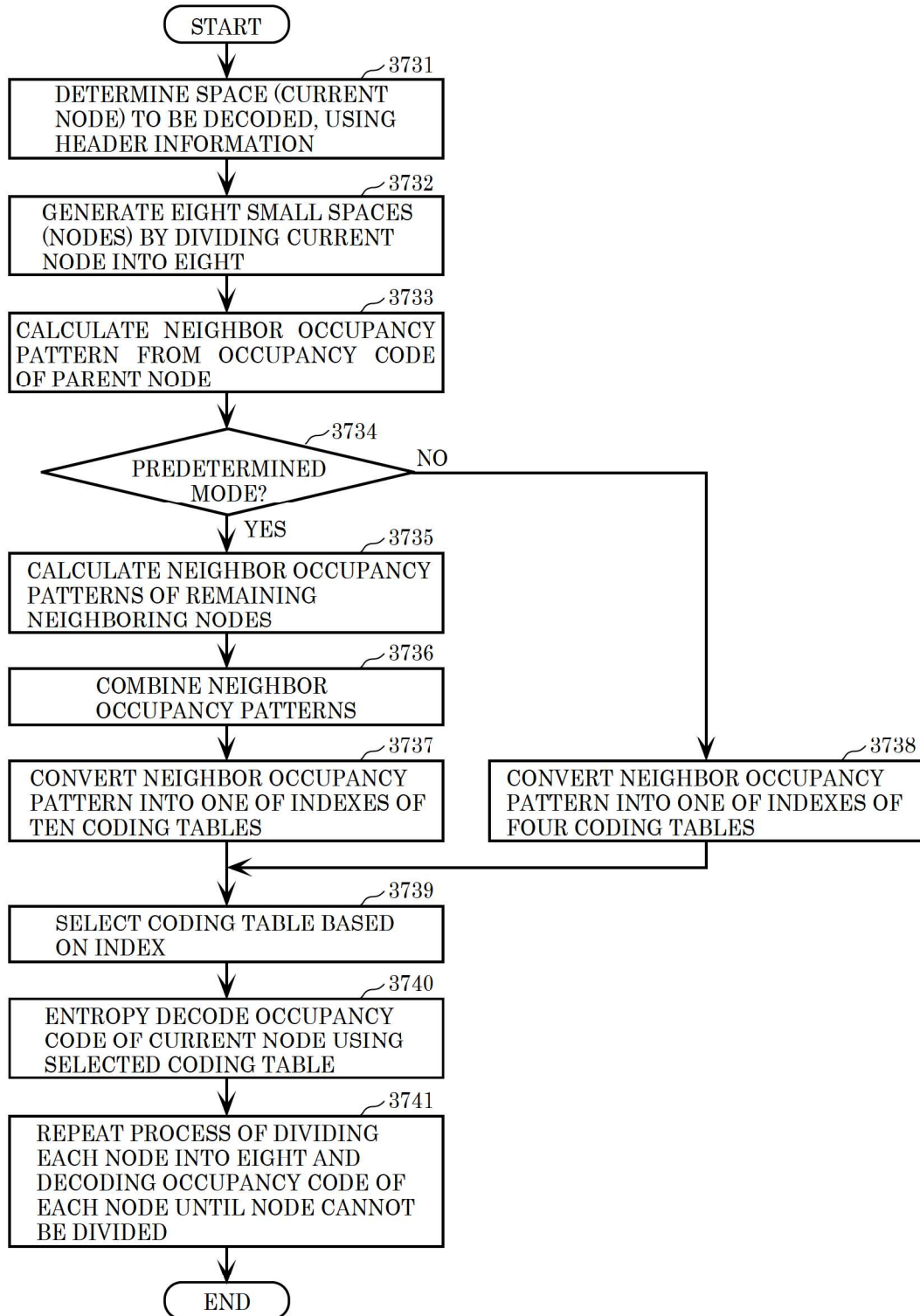


FIG. 122

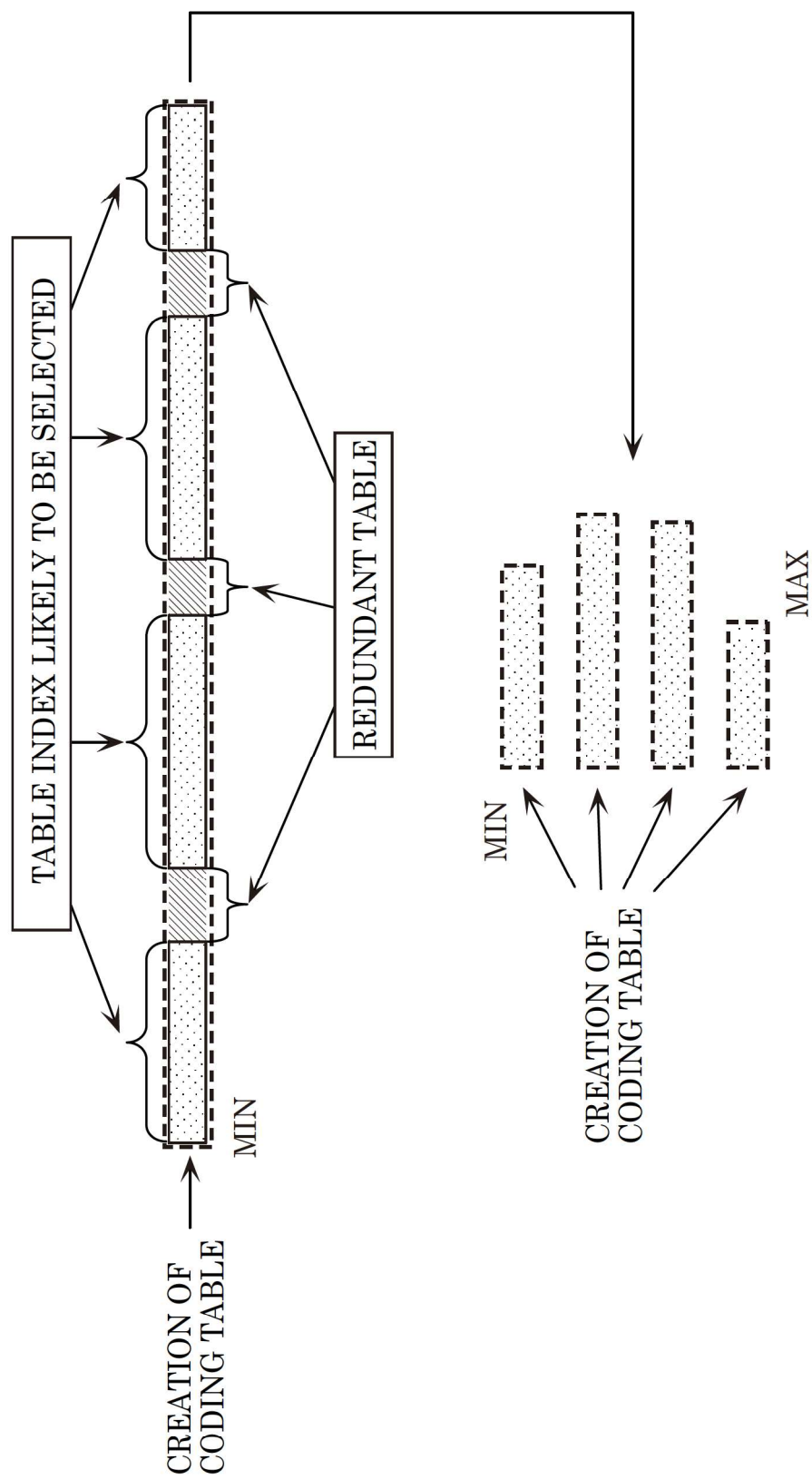


FIG. 123

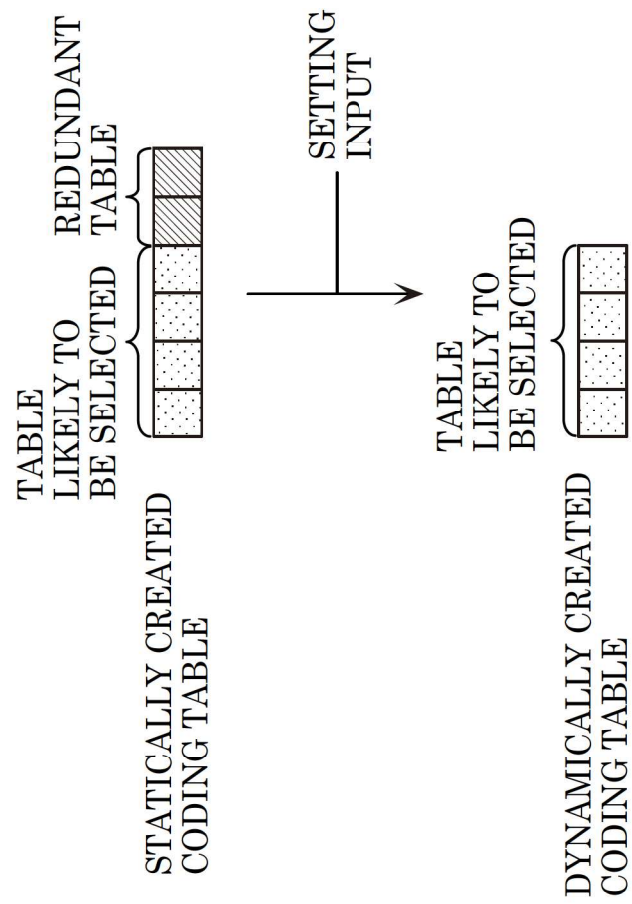


FIG. 124

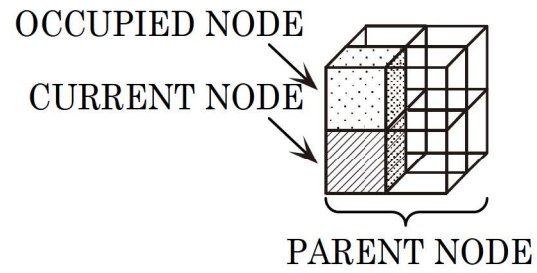


FIG. 125

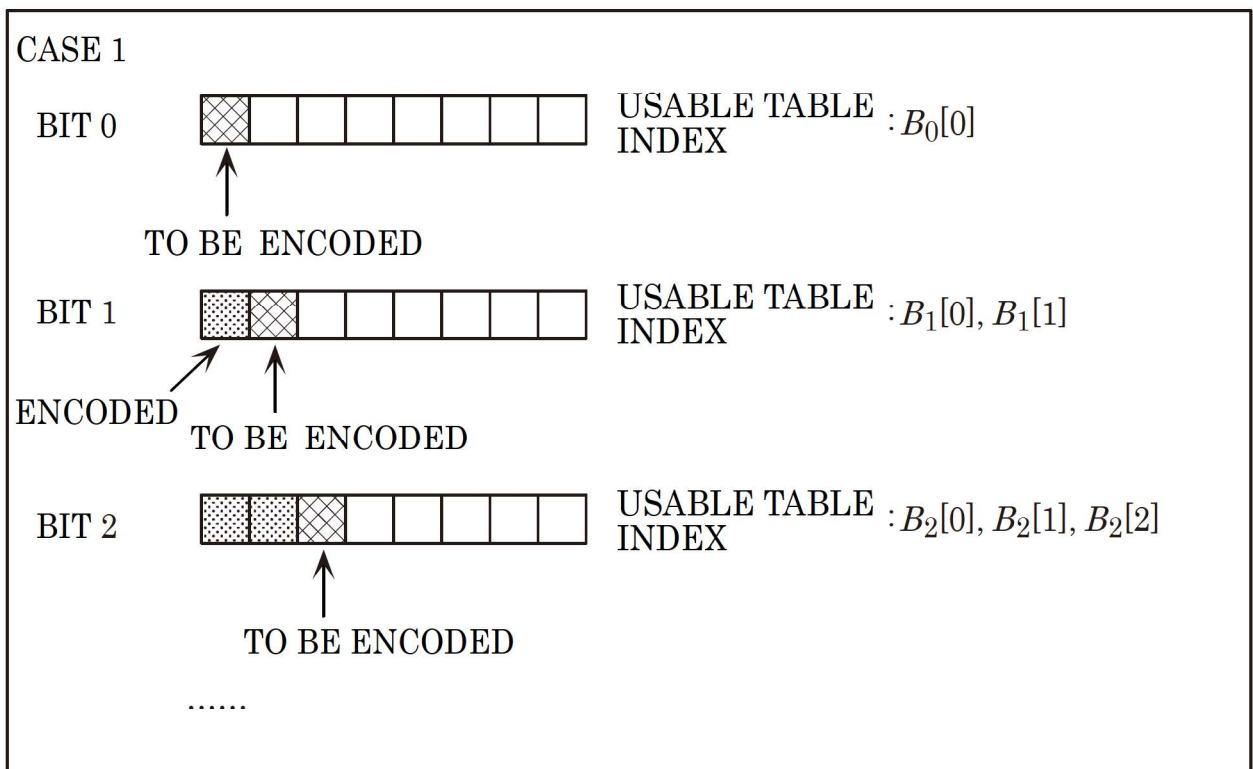


FIG. 126

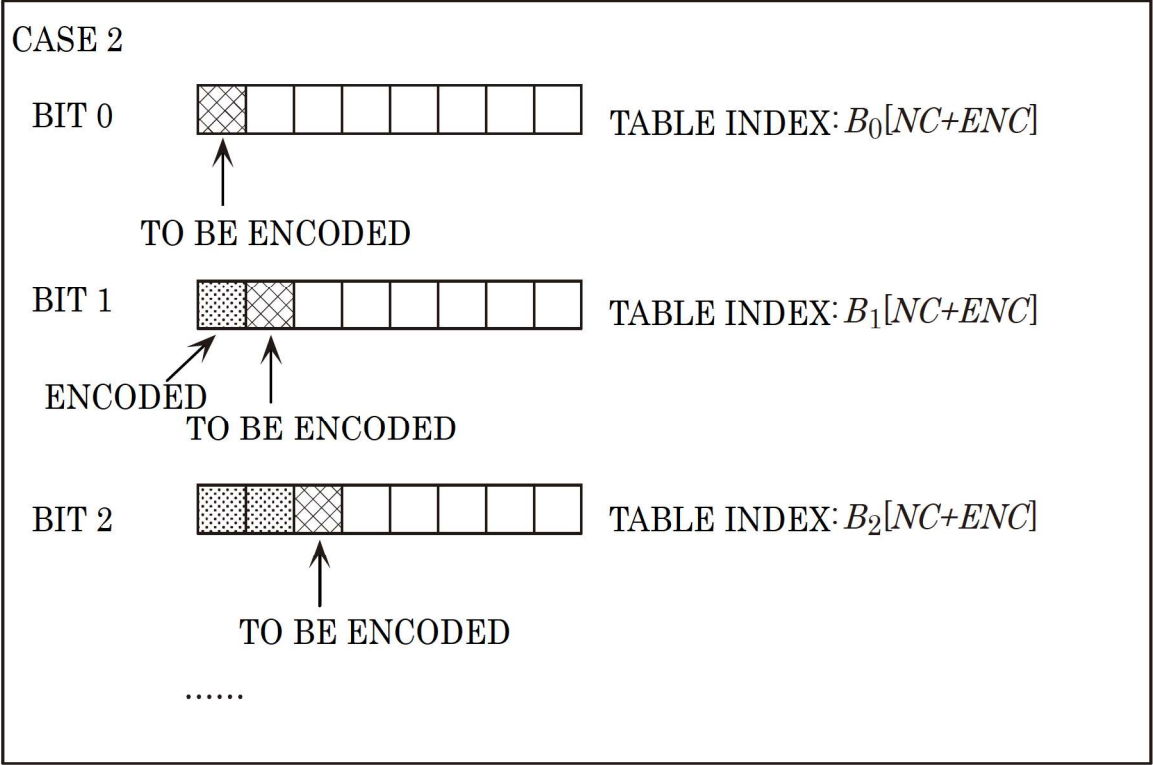


FIG. 127

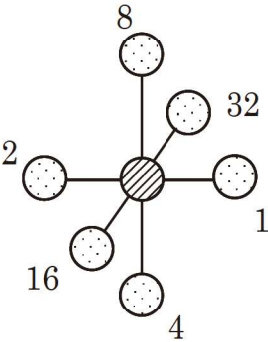


FIG. 128

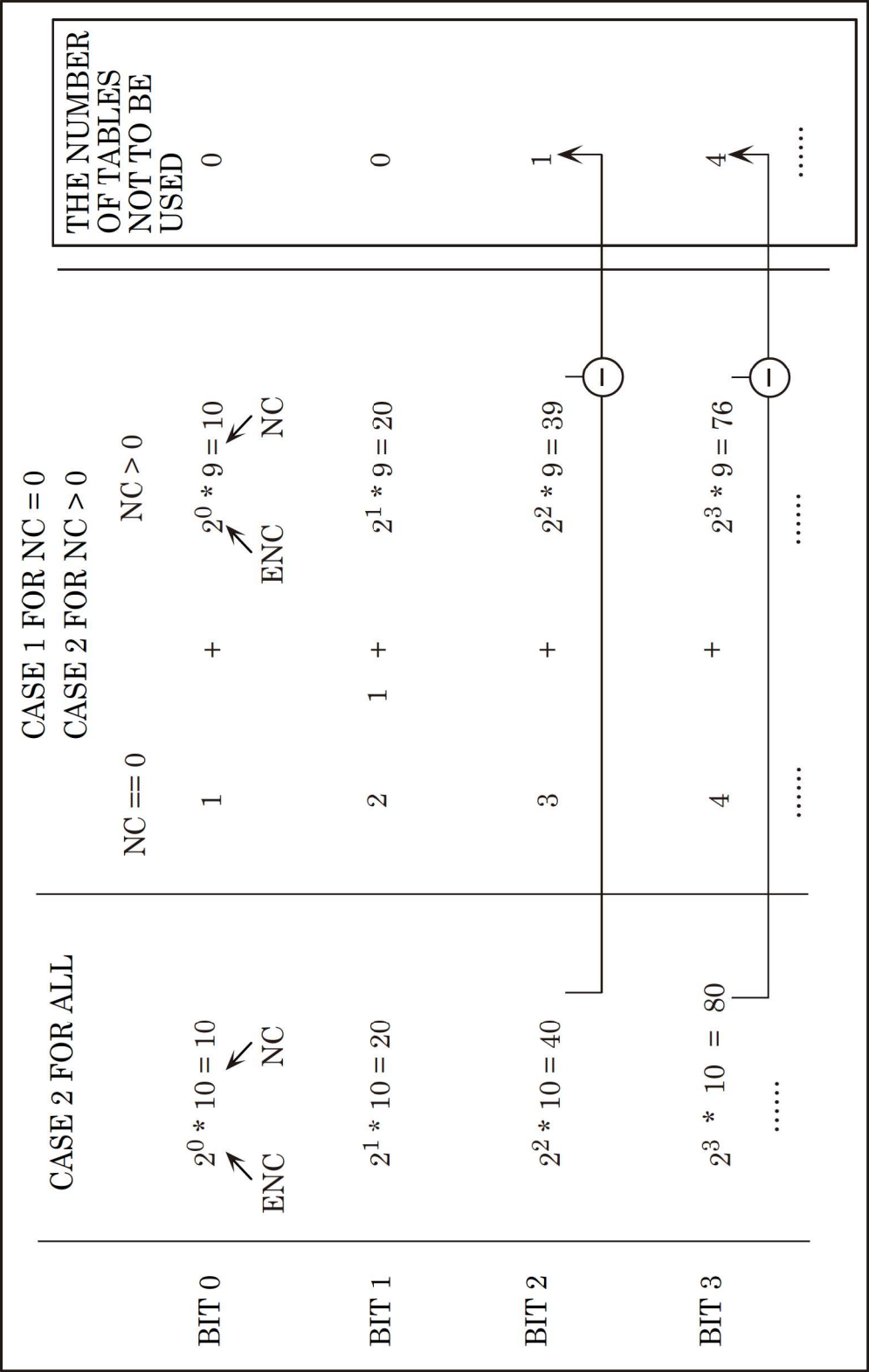


FIG. 129

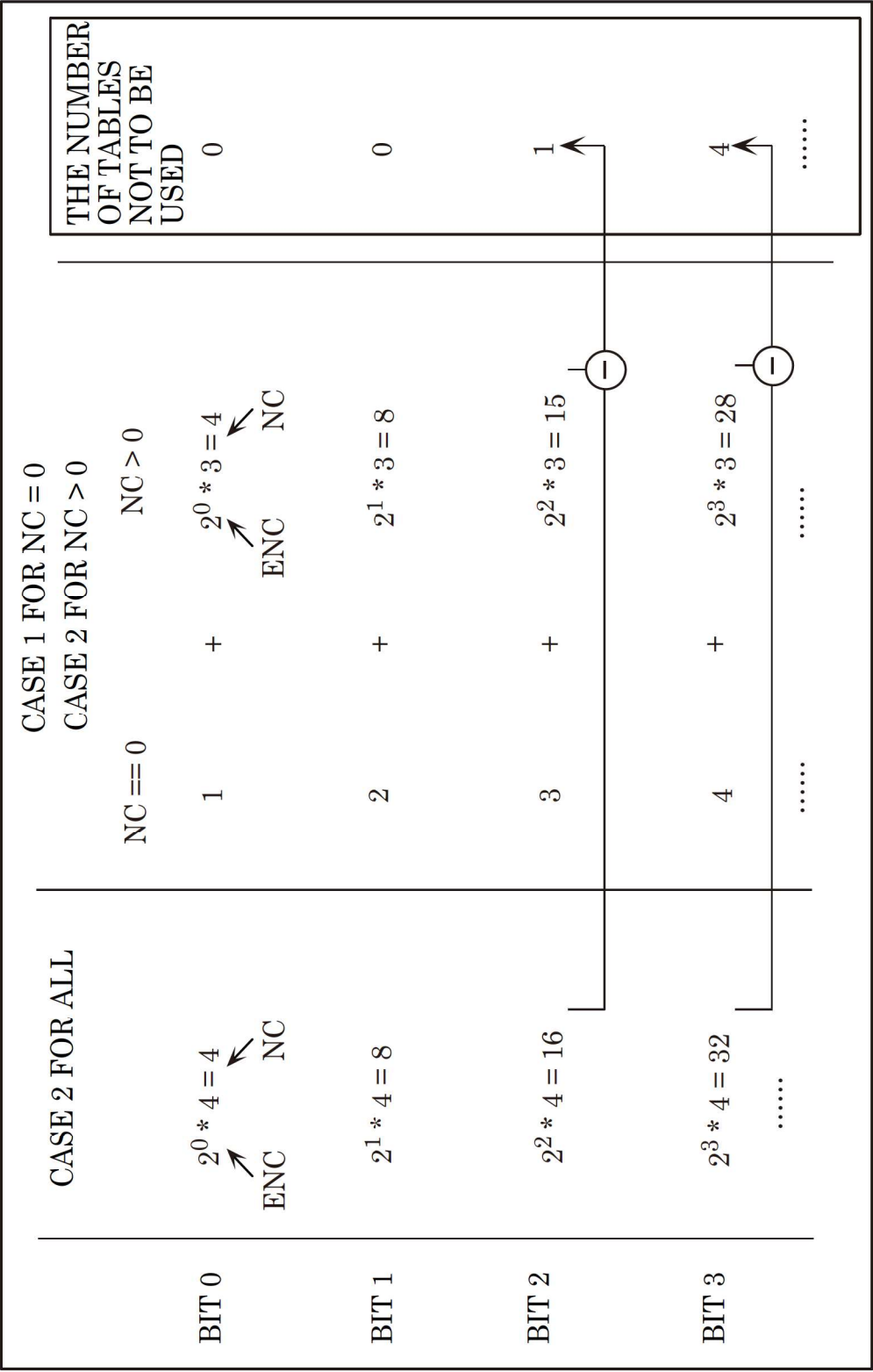


FIG. 130

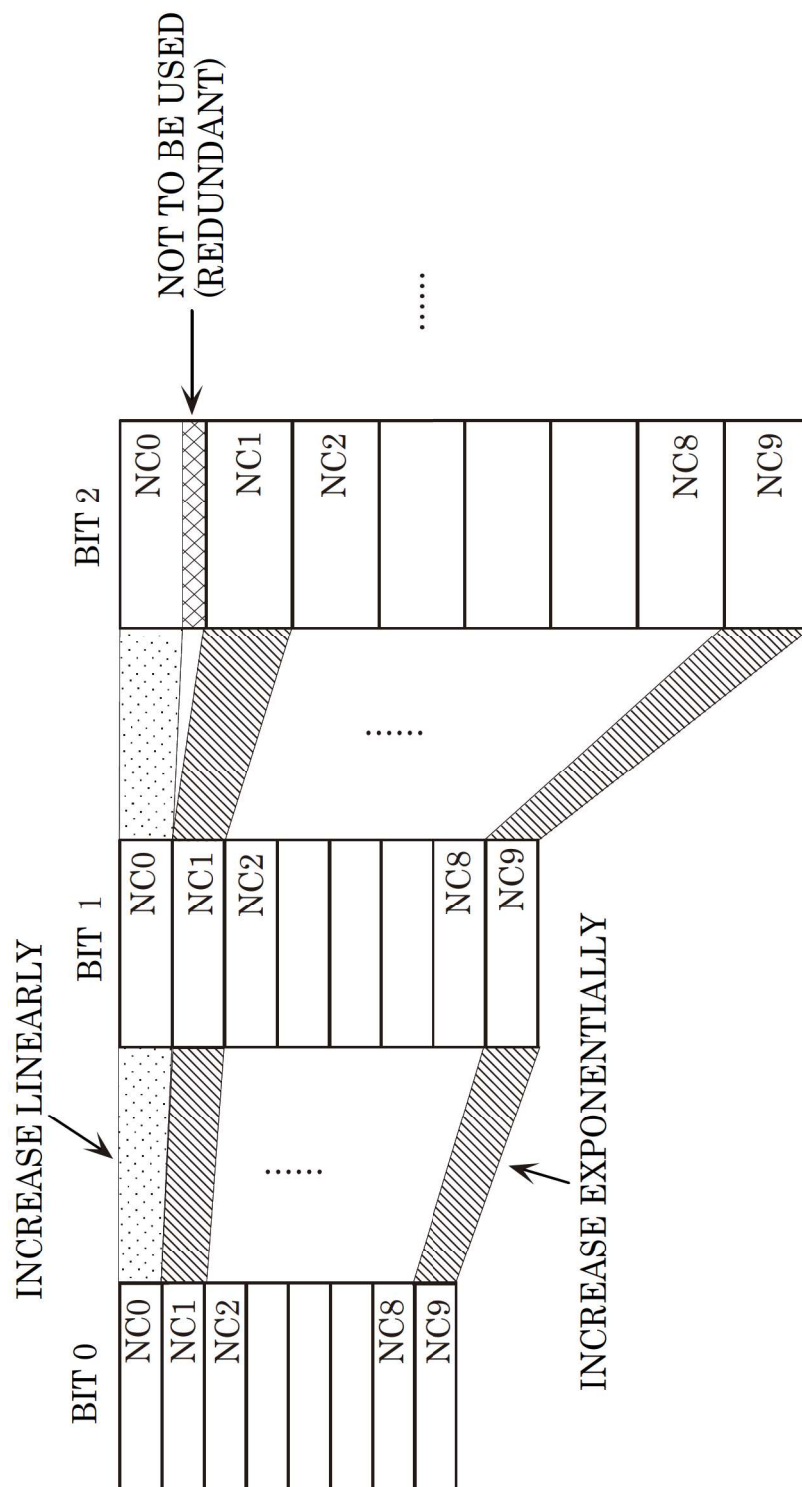


FIG. 131

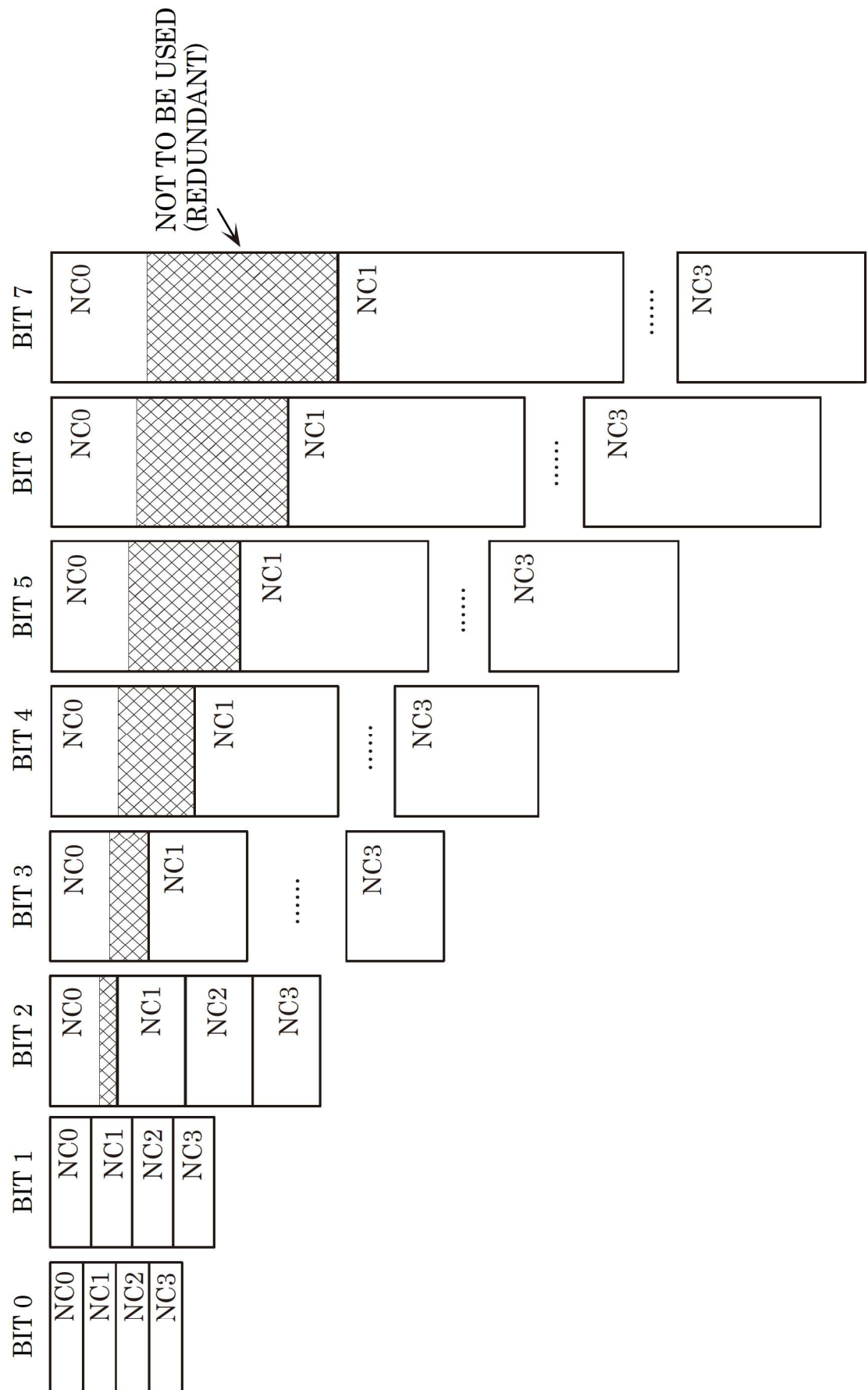


FIG. 132

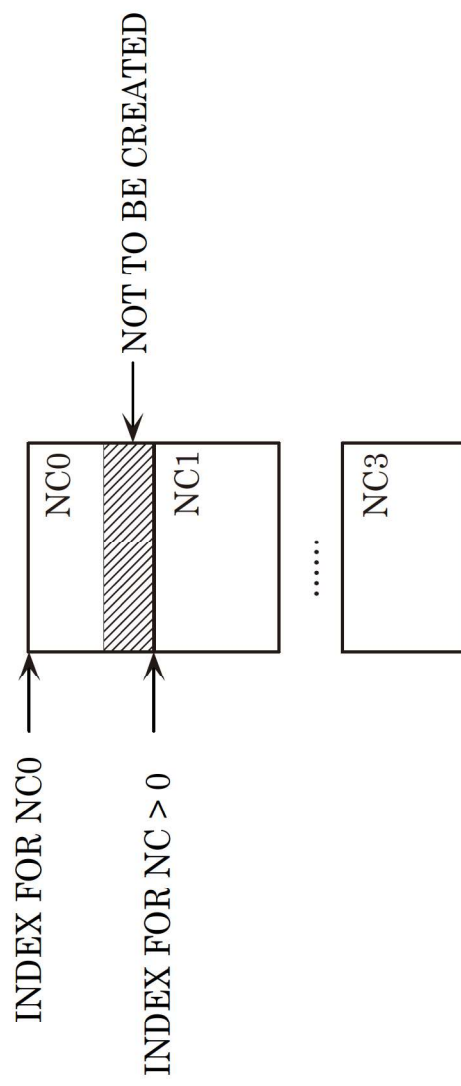


FIG. 133

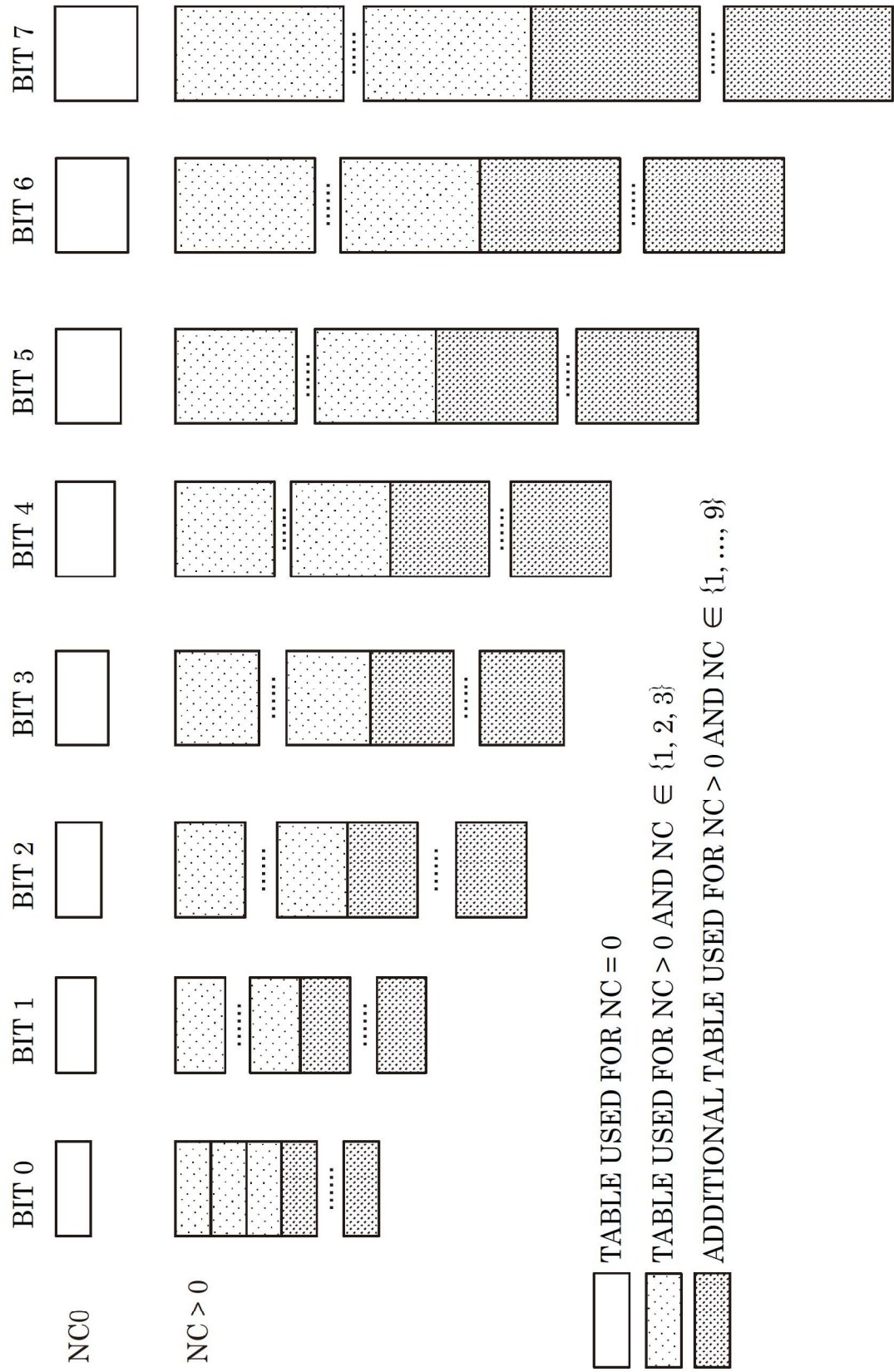


FIG. 134

BIT	0	1	2	3	4	5	6	7	TOTAL
NC = {0, 1, 2, 3}	4	8	15	28	53	102	199	392	801
NC = {0, 1, ..., 9}	10	20	39	76	149	294	583	1160	2331

FIG. 135

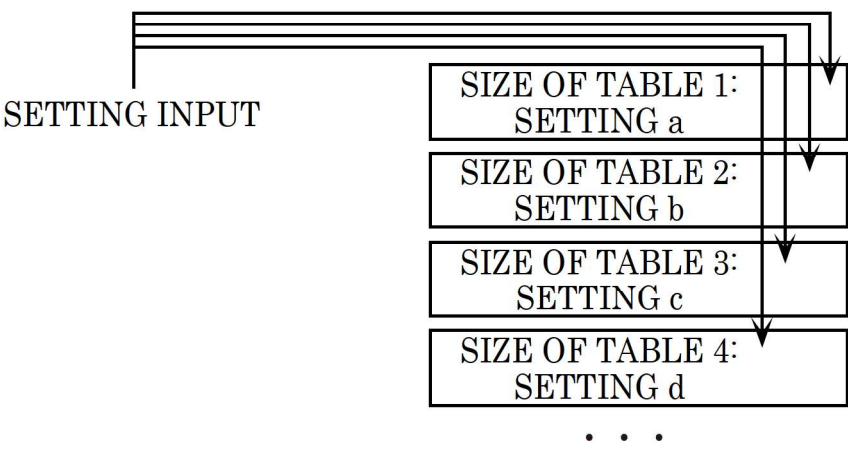


FIG. 136

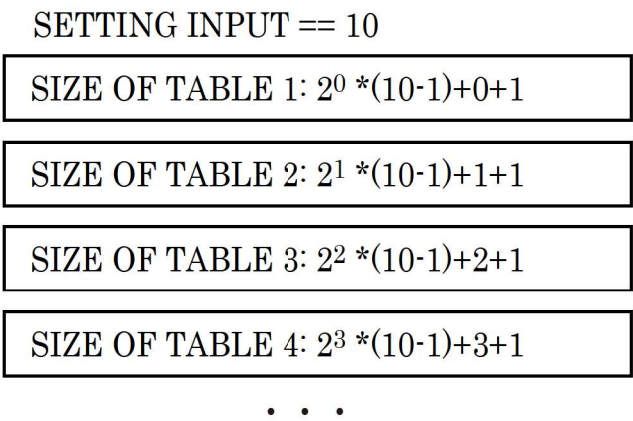


FIG. 137

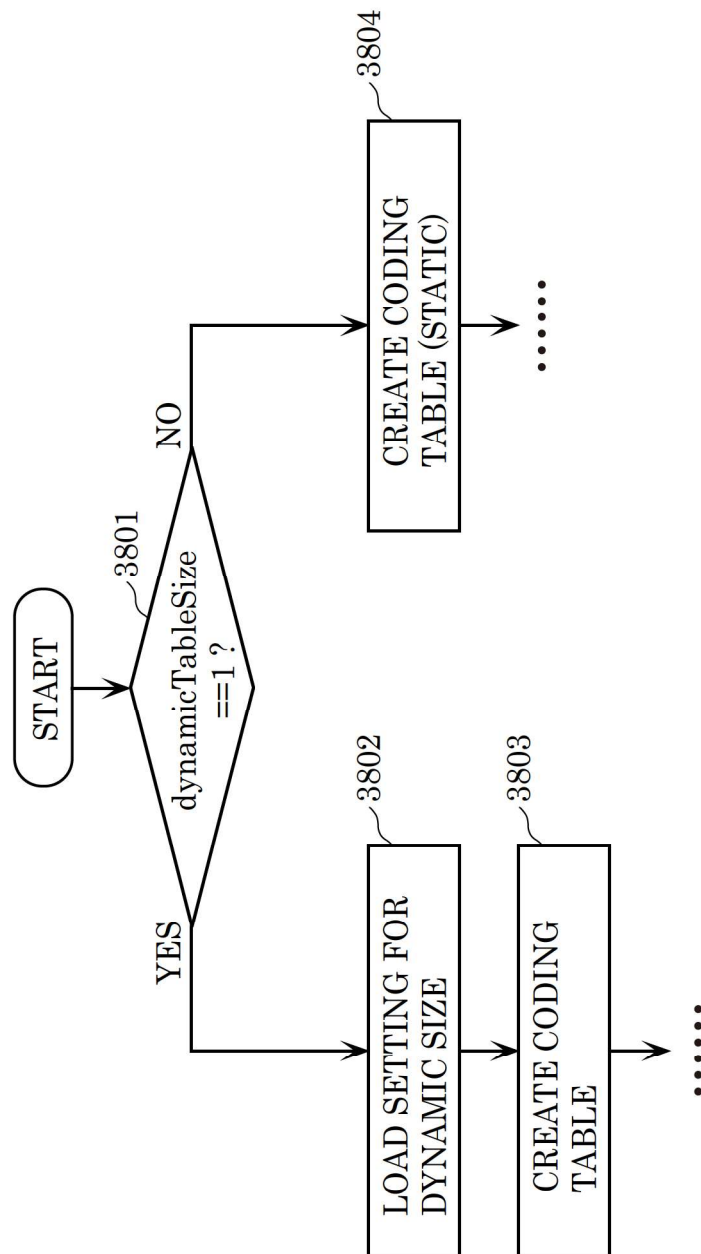


FIG. 138

SETTING INPUT == 4

SIZE OF TABLE 1: $2^0 * (4-1)+0+1$
SIZE OF TABLE 2: $2^1 * (4-1)+1+1$
SIZE OF TABLE 3: $2^2 * (4-1)+2+1$
SIZE OF TABLE 4: $2^3 * (4-1)+3+1$

• • •

FIG. 139

