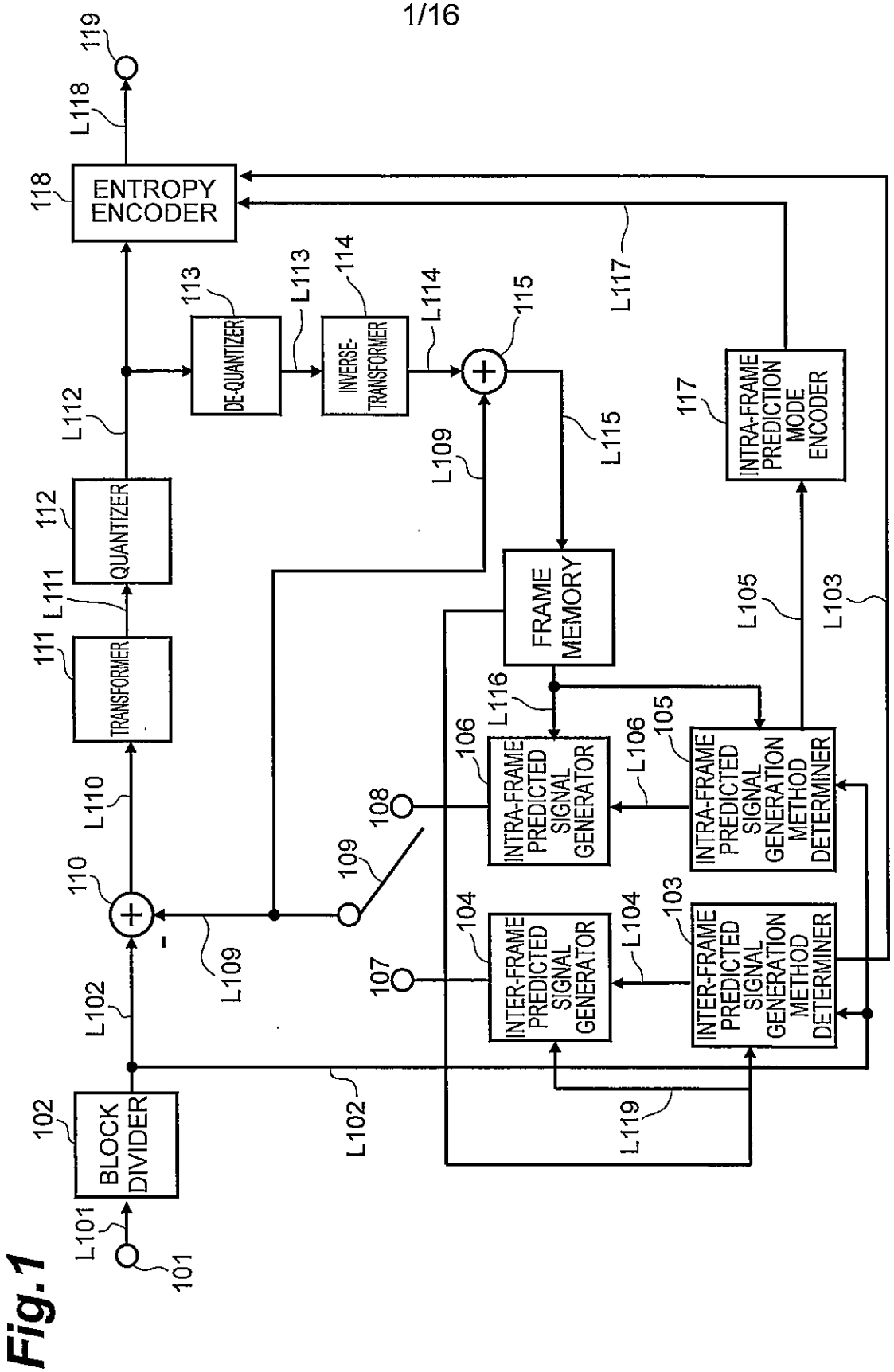
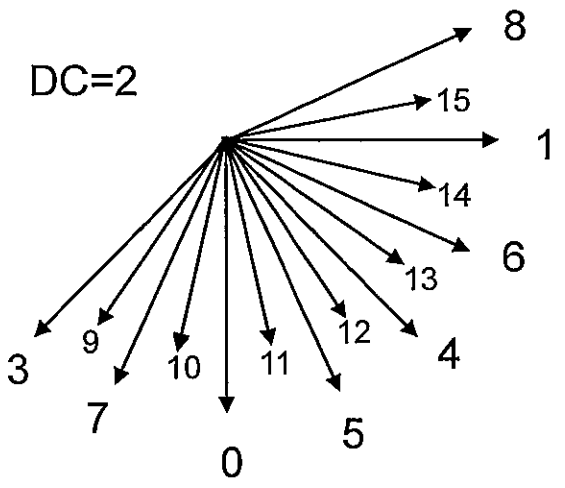

101
L101
BLOCK DIVIDER
102
L102
L102
L109
110
-
L110
TRANSFORMER
111
L111
QUANTIZER
112
L112
DE-QUANTIZER
113
L113
INVERSE-TRANSFORMER
114
L114
115
L115
L109
ENTROPY ENCODER
118
L118
119
L117
INTRA-FRAME PREDICTION MODE ENCODER
117
FRAME MEMORY
L105
L103
L116
106
INTRA-FRAME PREDICTED SIGNAL GENERATOR
L106
105
INTRA-FRAME PREDICTED SIGNAL GENERATION METHOD DETERMINER
108
109
104
INTER-FRAME PREDICTED SIGNAL GENERATOR
L104
103
INTER-FRAME PREDICTED SIGNAL GENERATION METHOD DETERMINER
107
L119

Fig.1

Fig.2



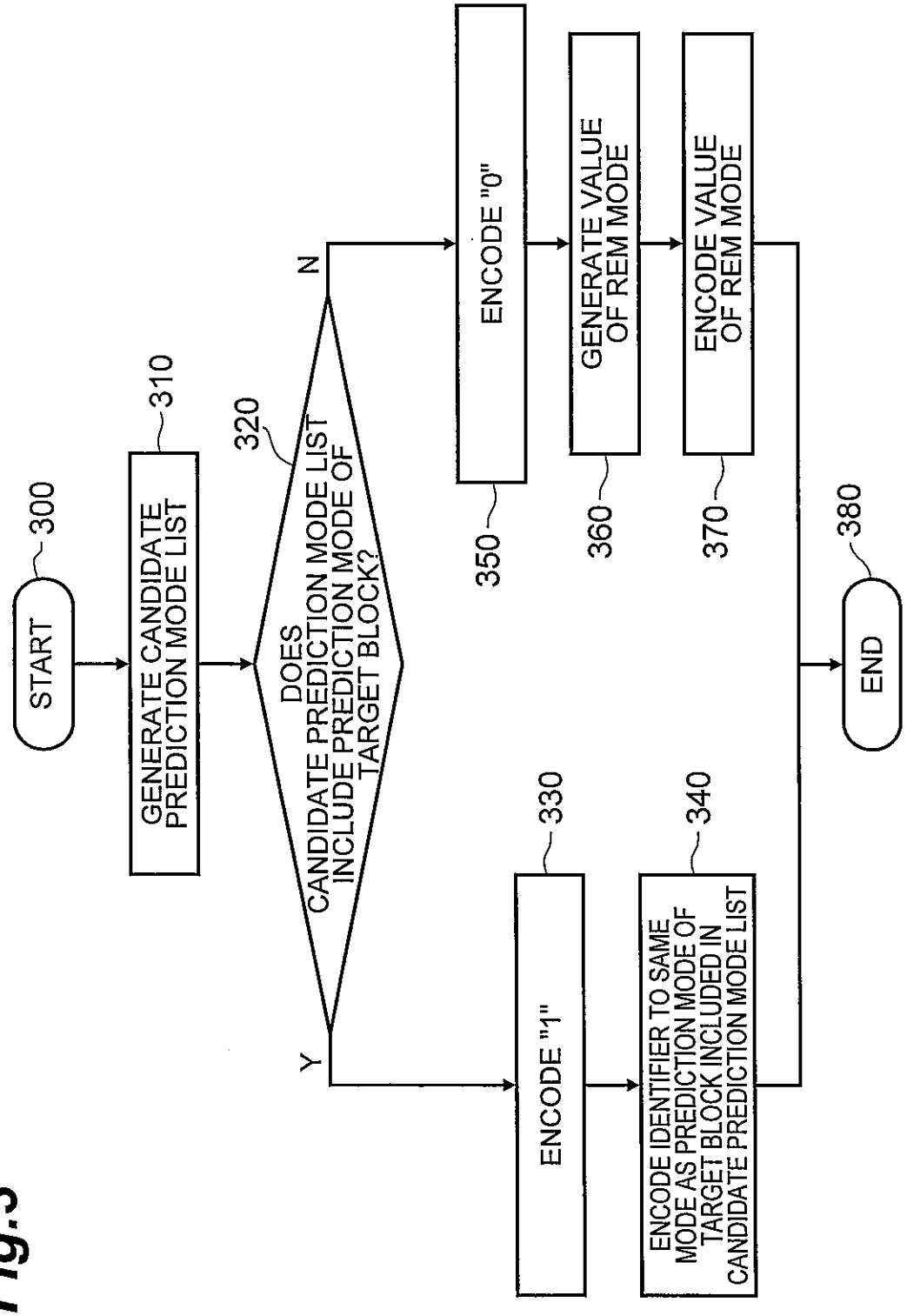

START
300
GENERATE CANDIDATE PREDICTION MODE LIST
310
DOES CANDIDATE PREDICTION MODE LIST INCLUDE PREDICTION MODE OF TARGET BLOCK?
320
N
Y
ENCODE "0"
350
GENERATE VALUE OF REM MODE
360
ENCODE VALUE OF REM MODE
370
ENCODE "1"
330
ENCODE IDENTIFIER TO SAME MODE AS PREDICTION MODE OF TARGET BLOCK INCLUDED IN CANDIDATE PREDICTION MODE LIST
340
END
380

Fig.3

Fig.4

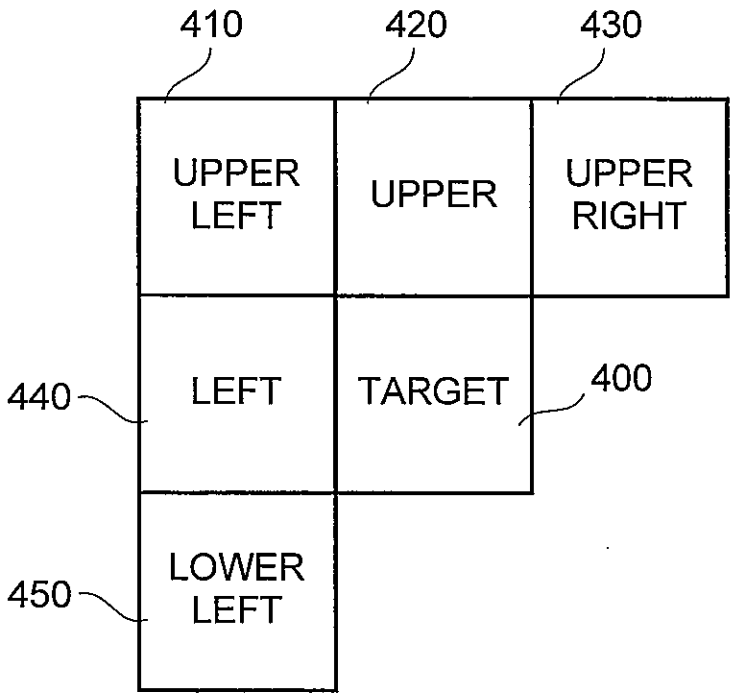

410
420
430
UPPER LEFT
UPPER
UPPER RIGHT
440
LEFT
TARGET
400
450
LOWER LEFT

Fig.5

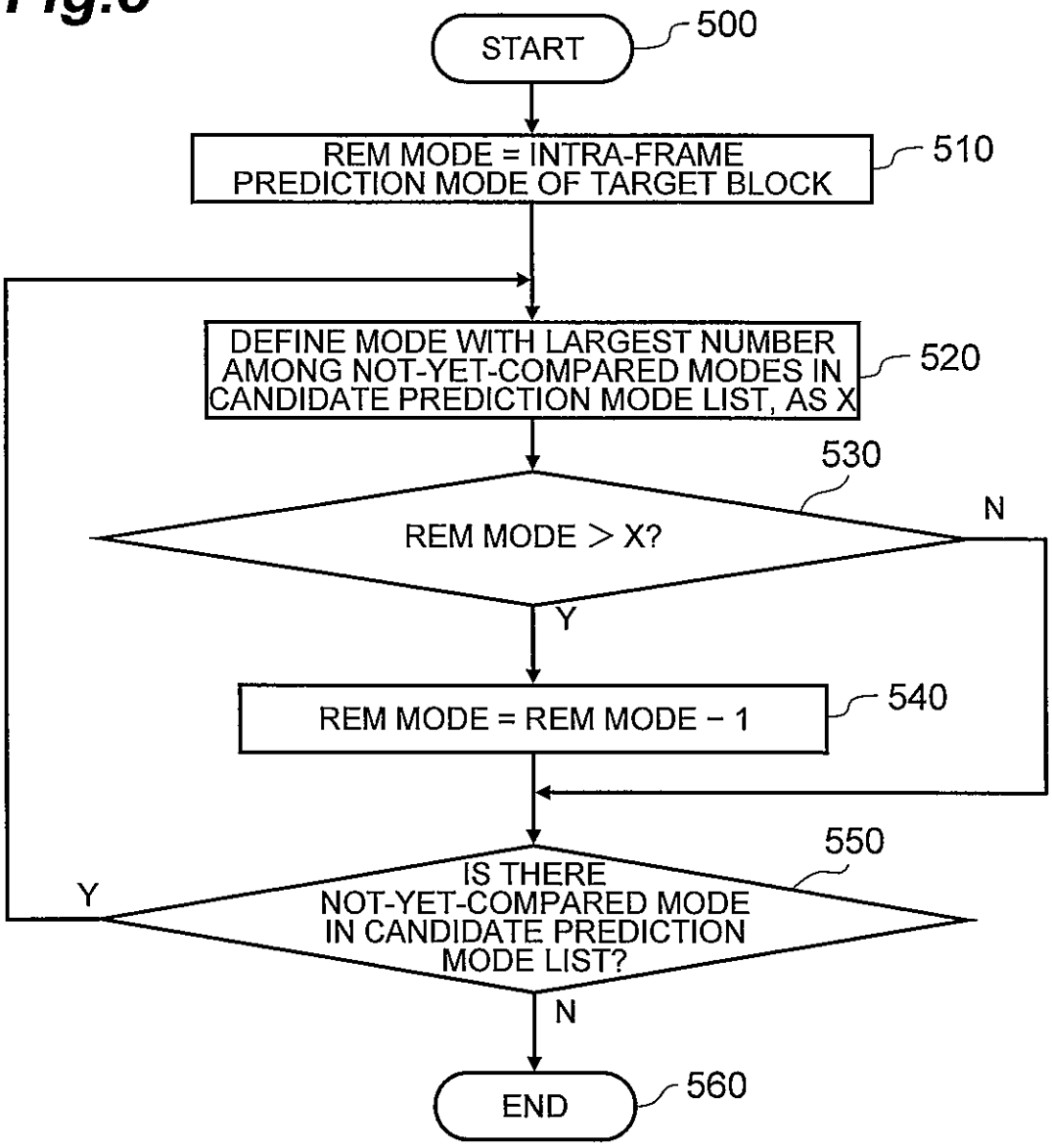
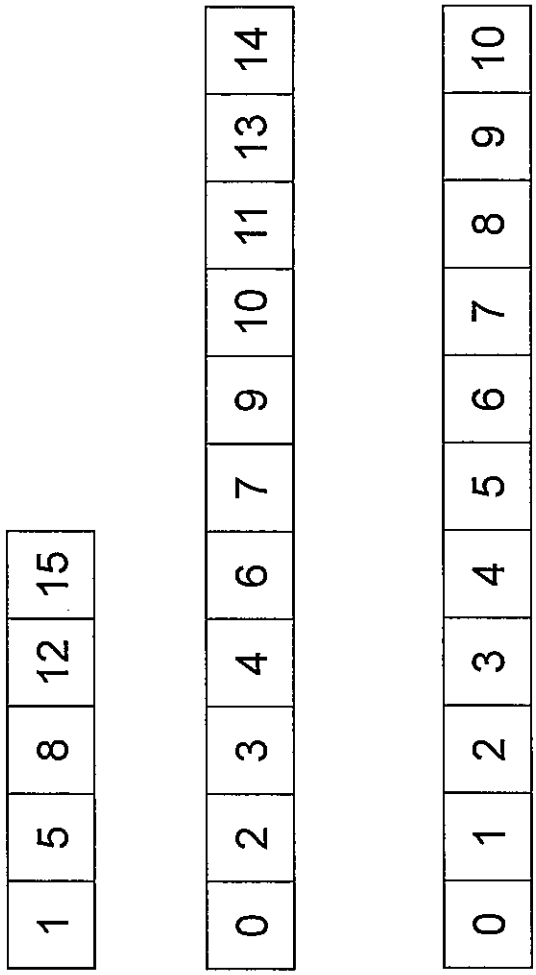

START
500
REM MODE = INTRA-FRAME PREDICTION MODE OF TARGET BLOCK
510
DEFINE MODE WITH LARGEST NUMBER AMONG NOT-YET-COMPARED MODES IN CANDIDATE PREDICTION MODE LIST, AS X
520
530
REM MODE > X?
N
Y
REM MODE = REM MODE − 1
540
550
IS THERE NOT-YET-COMPARED MODE IN CANDIDATE PREDICTION MODE LIST?
Y
N
END
560

Fig.6



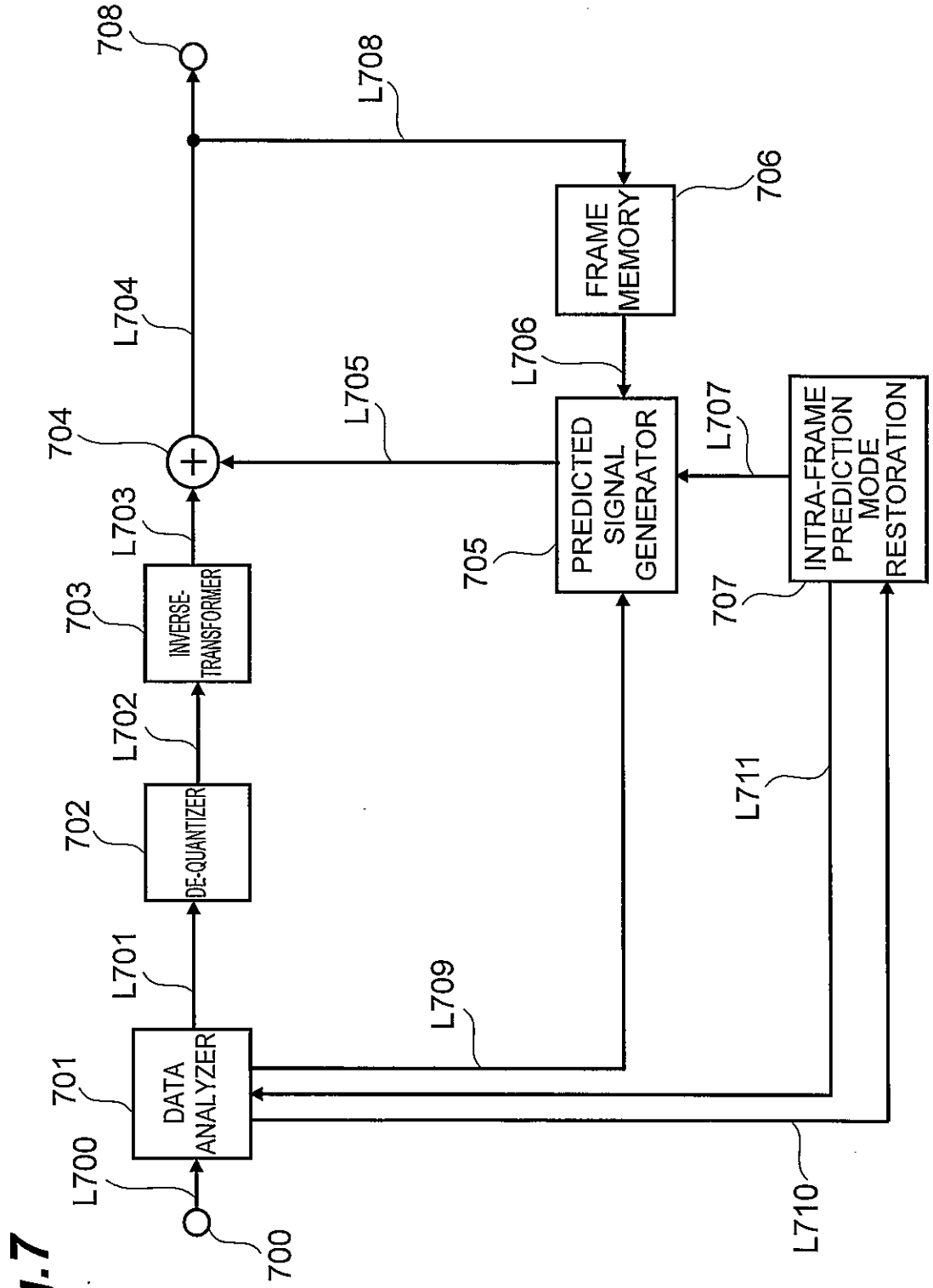

708
L708
706
FRAME MEMORY
L704
L706
L705
704
L707
PREDICTED SIGNAL GENERATOR
INTRA-FRAME PREDICTION MODE RESTORATION
L703
705
703
INVERSE-TRANSFORMER
707
L702
L711
702
DE-QUANTIZER
L701
L709
701
DATA ANALYZER
L700
L710
700

Fig.7

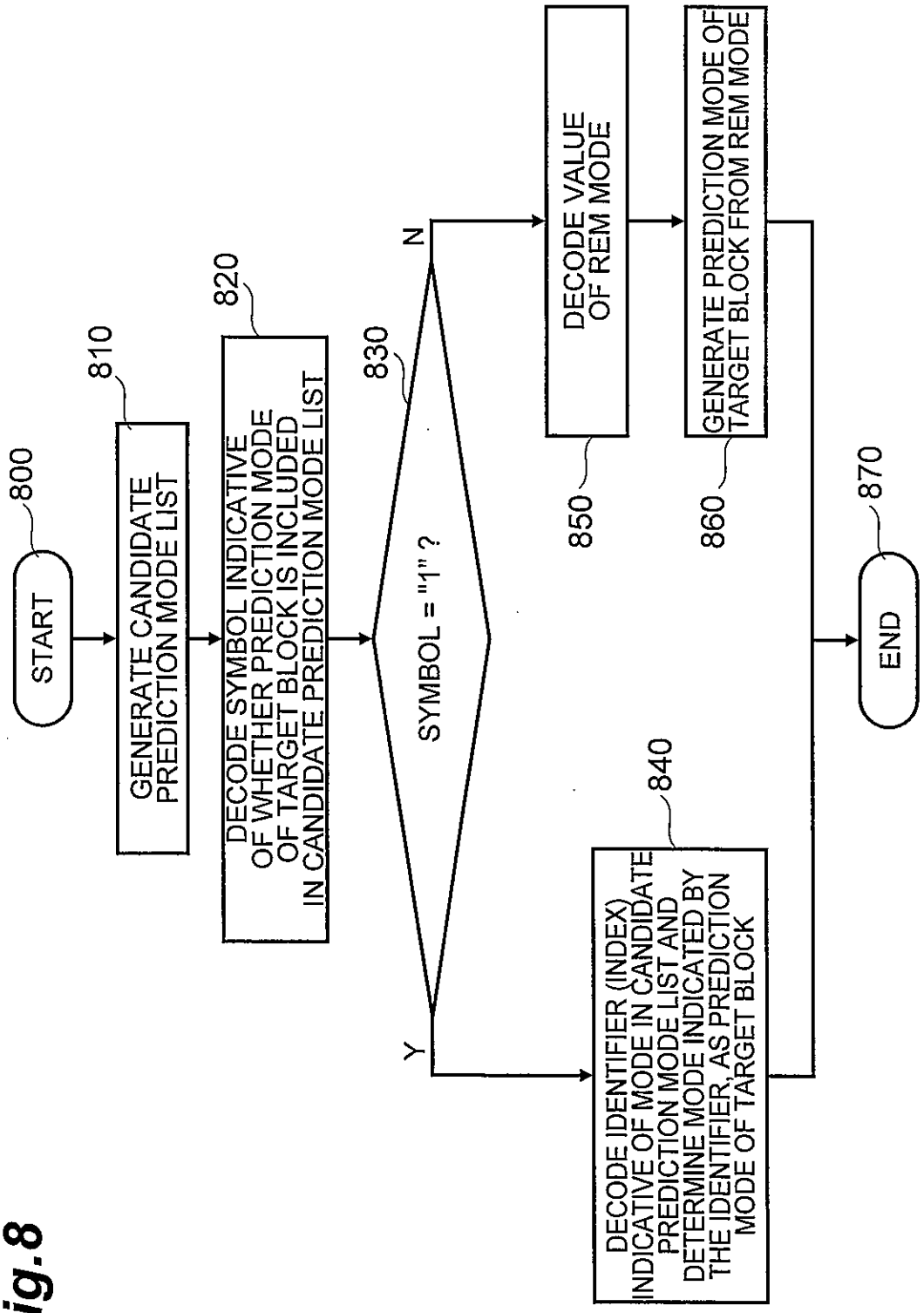

800
START
810
GENERATE CANDIDATE PREDICTION MODE LIST
820
DECODE SYMBOL INDICATIVE OF WHETHER PREDICTION MODE OF TARGET BLOCK IS INCLUDED IN CANDIDATE PREDICTION MODE LIST
830
SYMBOL = "1" ?
N
Y
850
DECODE VALUE OF REM MODE
860
GENERATE PREDICTION MODE OF TARGET BLOCK FROM REM MODE
840
DECODE IDENTIFIER (INDEX) INDICATIVE OF MODE IN CANDIDATE PREDICTION MODE LIST AND DETERMINE MODE INDICATED BY THE IDENTIFIER, AS PREDICTION MODE OF TARGET BLOCK
870
END

Fig.8

Fig.9

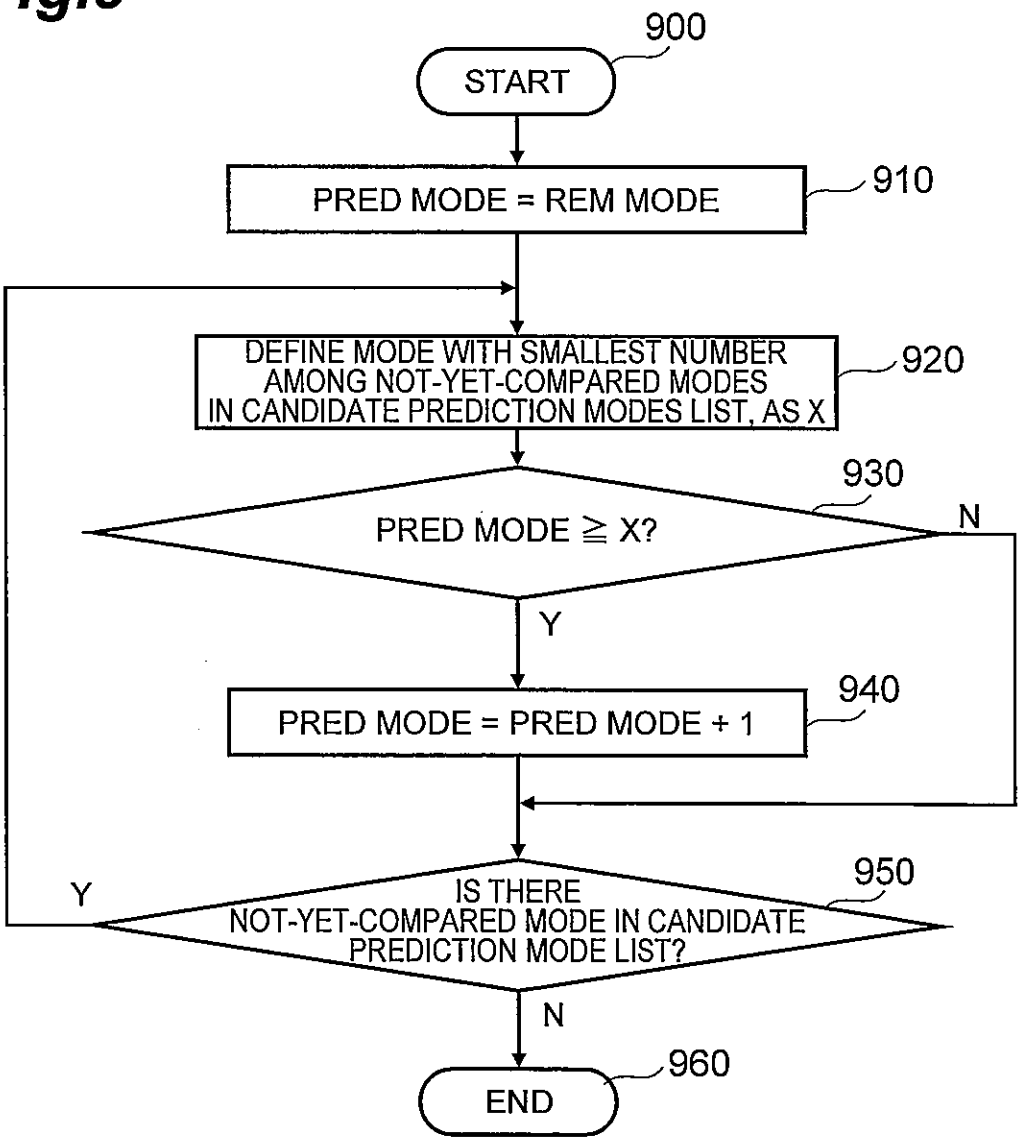
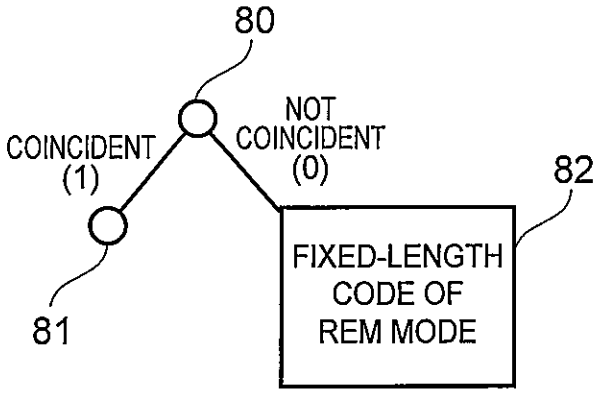
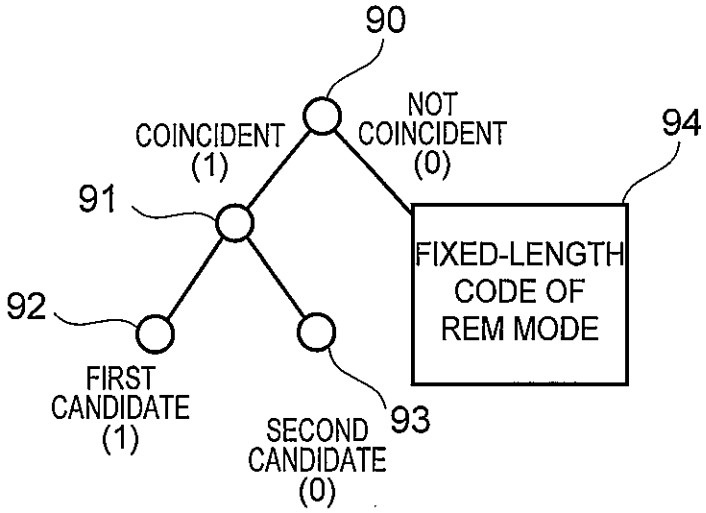

900
START
PRED MODE = REM MODE
910
DEFINE MODE WITH SMALLEST NUMBER AMONG NOT-YET-COMPARED MODES IN CANDIDATE PREDICTION MODES LIST, AS X
920
930
PRED MODE ≧ X?
N
Y
940
PRED MODE = PRED MODE + 1
950
Y
IS THERE NOT-YET-COMPARED MODE IN CANDIDATE PREDICTION MODE LIST?
N
960
END

Fig.10


80
COINCIDENT
(1)
NOT
COINCIDENT
(0)
82
FIXED-LENGTH
CODE OF
REM MODE
81

(A)


90
COINCIDENT
(1)
NOT
COINCIDENT
(0)
94
91
FIXED-LENGTH
CODE OF
REM MODE
92
FIRST
CANDIDATE
(1)
SECOND
CANDIDATE
(0)
93

(B)

Fig.11

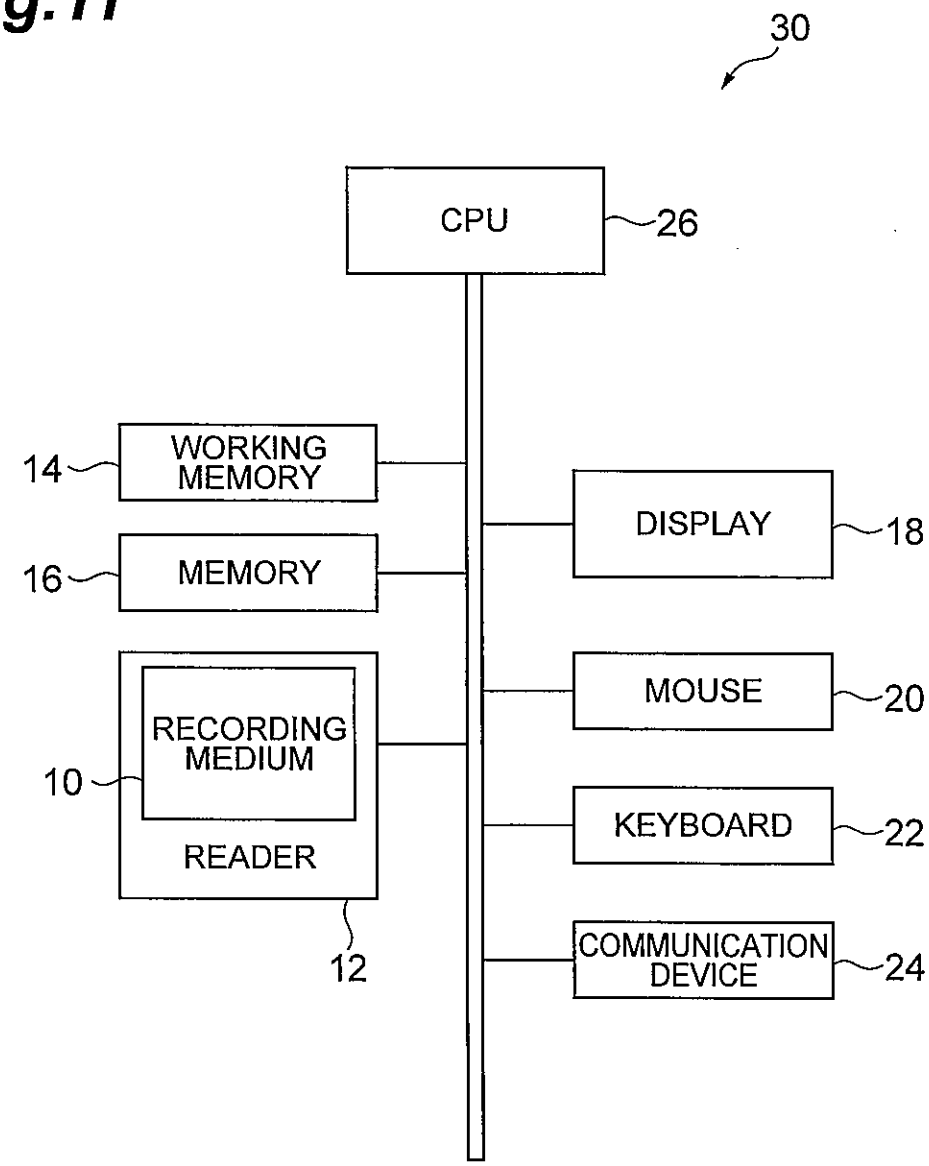

30
CPU
26
14
WORKING MEMORY
16
MEMORY
10
RECORDING MEDIUM
READER
12
DISPLAY
18
MOUSE
20
KEYBOARD
22
COMMUNICATION DEVICE
24

Fig.12

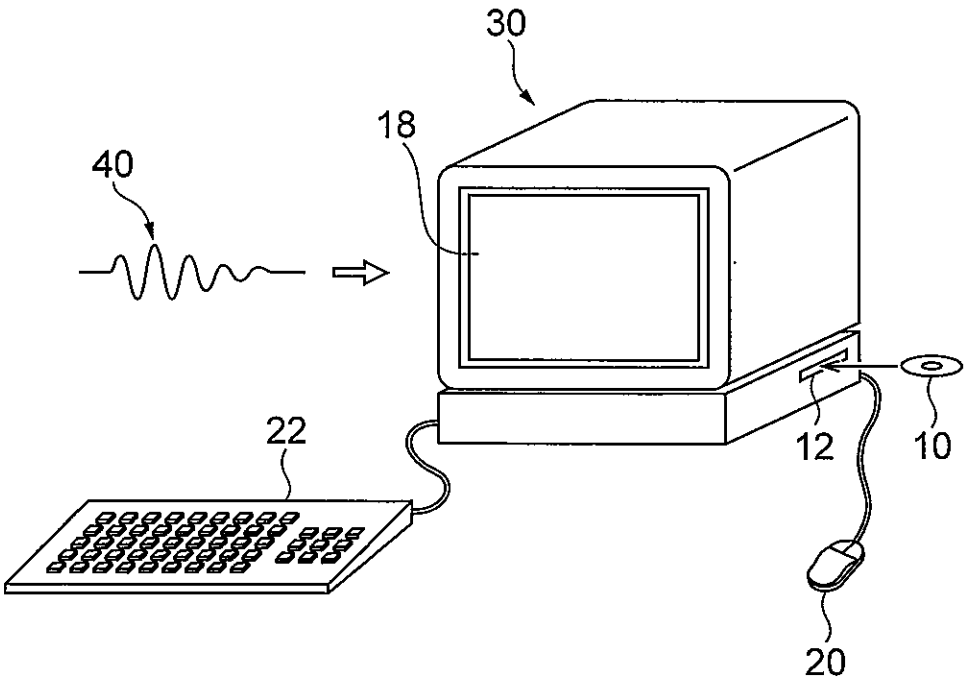


Fig.13

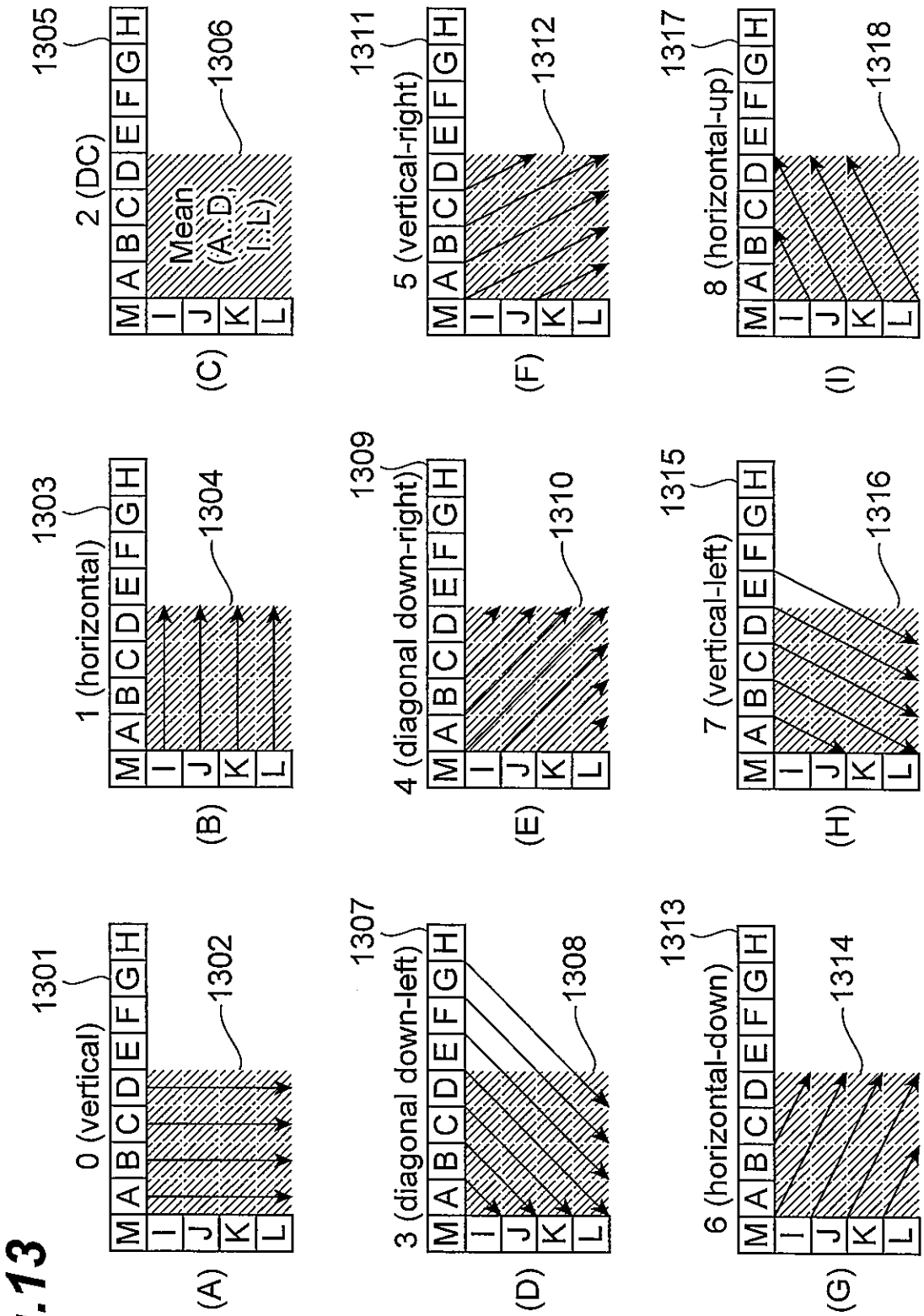

0 (vertical)
1 (horizontal)
2 (DC)
Mean (A..D; I..L)
3 (diagonal down-left)
4 (diagonal down-right)
5 (vertical-right)
6 (horizontal-down)
7 (vertical-left)
8 (horizontal-up)
M A B C D E F G H
I J K L
1301
1302
1303
1304
1305
1306
1307
1308
1309
1310
1311
1312
1313
1314
1315
1316
1317
1318
(A)
(B)
(C)
(D)
(E)
(F)
(G)
(H)
(I)

Fig.14

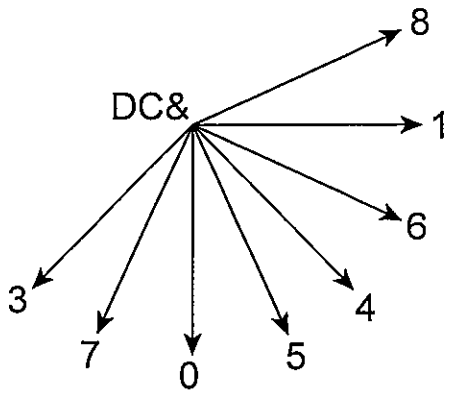


Fig.15

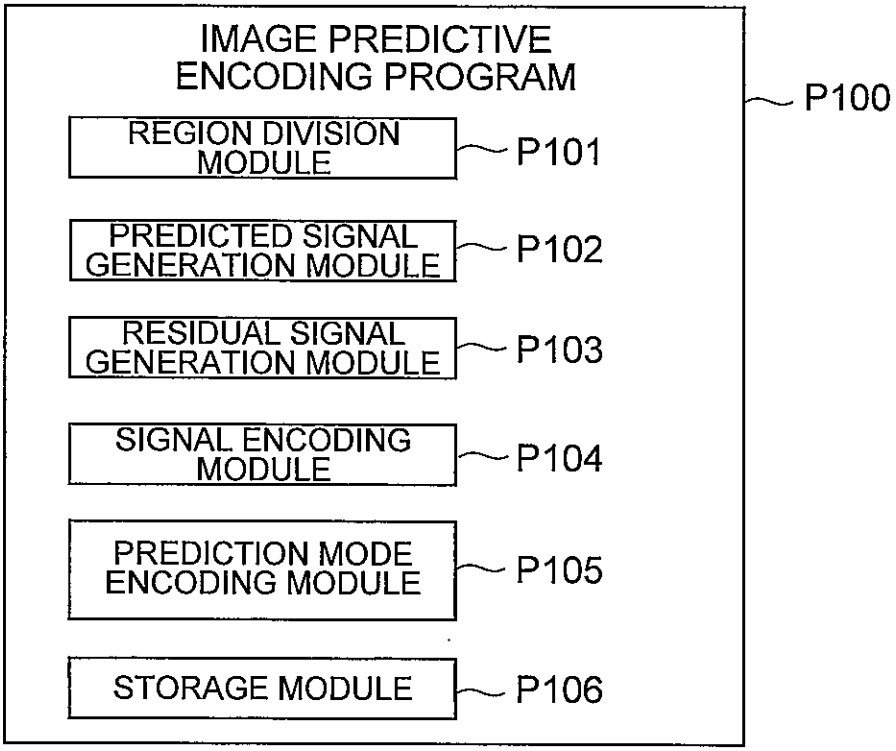
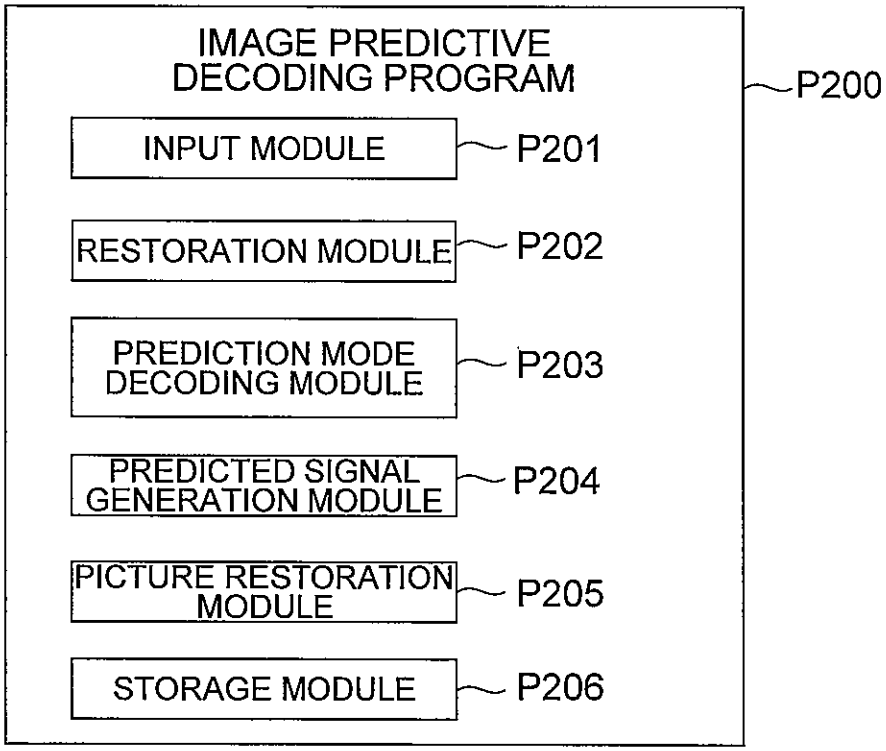

IMAGE PREDICTIVE ENCODING PROGRAM
P100
REGION DIVISION MODULE
P101
PREDICTED SIGNAL GENERATION MODULE
P102
RESIDUAL SIGNAL GENERATION MODULE
P103
SIGNAL ENCODING MODULE
P104
PREDICTION MODE ENCODING MODULE
P105
STORAGE MODULE
P106

Fig.16


IMAGE PREDICTIVE DECODING PROGRAM
P200
INPUT MODULE
P201
RESTORATION MODULE
P202
PREDICTION MODE DECODING MODULE
P203
PREDICTED SIGNAL GENERATION MODULE
P204
PICTURE RESTORATION MODULE
P205
STORAGE MODULE
P206