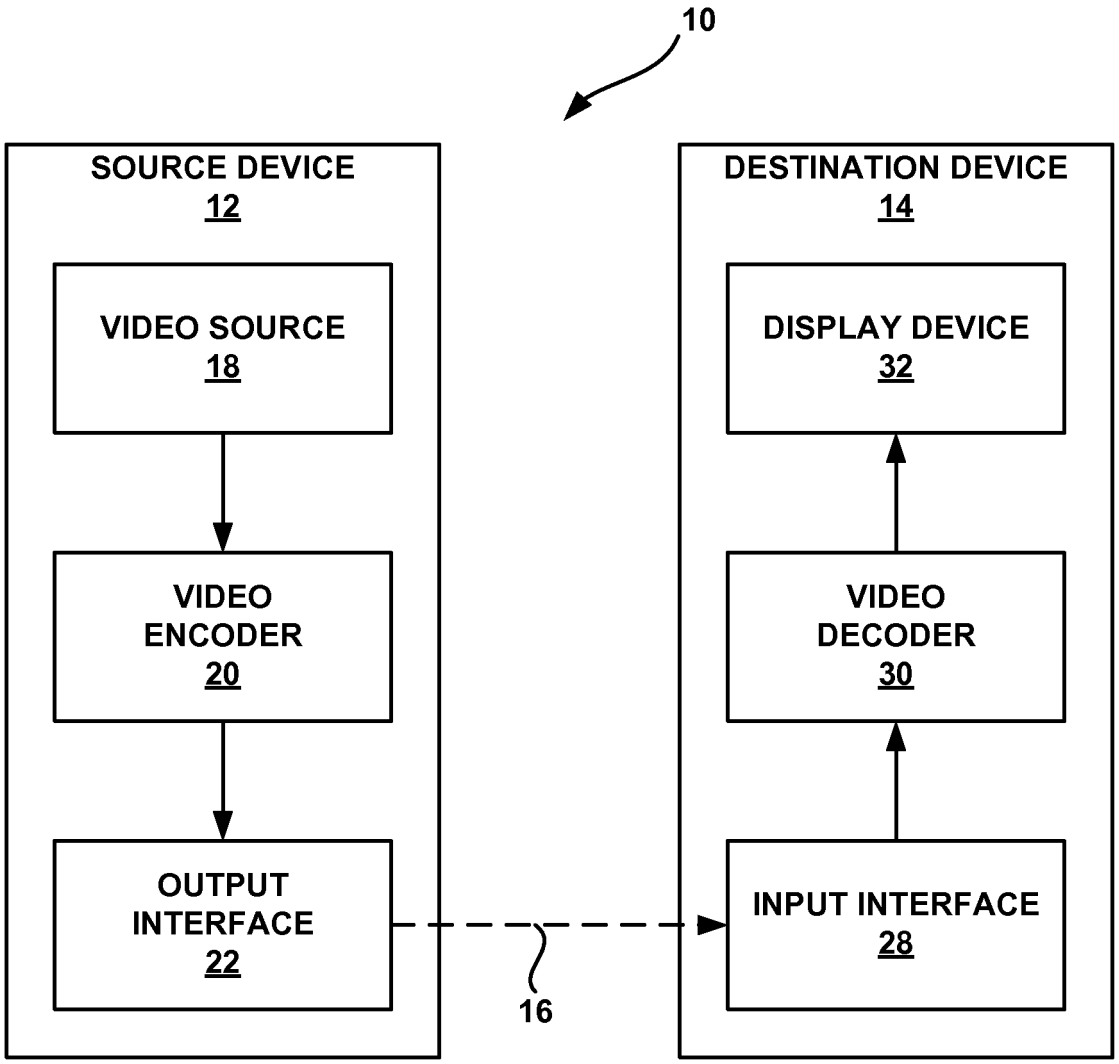

10
SOURCE DEVICE
12
VIDEO SOURCE
18
VIDEO
ENCODER
20
OUTPUT
INTERFACE
22
16
DESTINATION DEVICE
14
DISPLAY DEVICE
32
VIDEO
DECODER
30
INPUT INTERFACE
28

FIG. 1

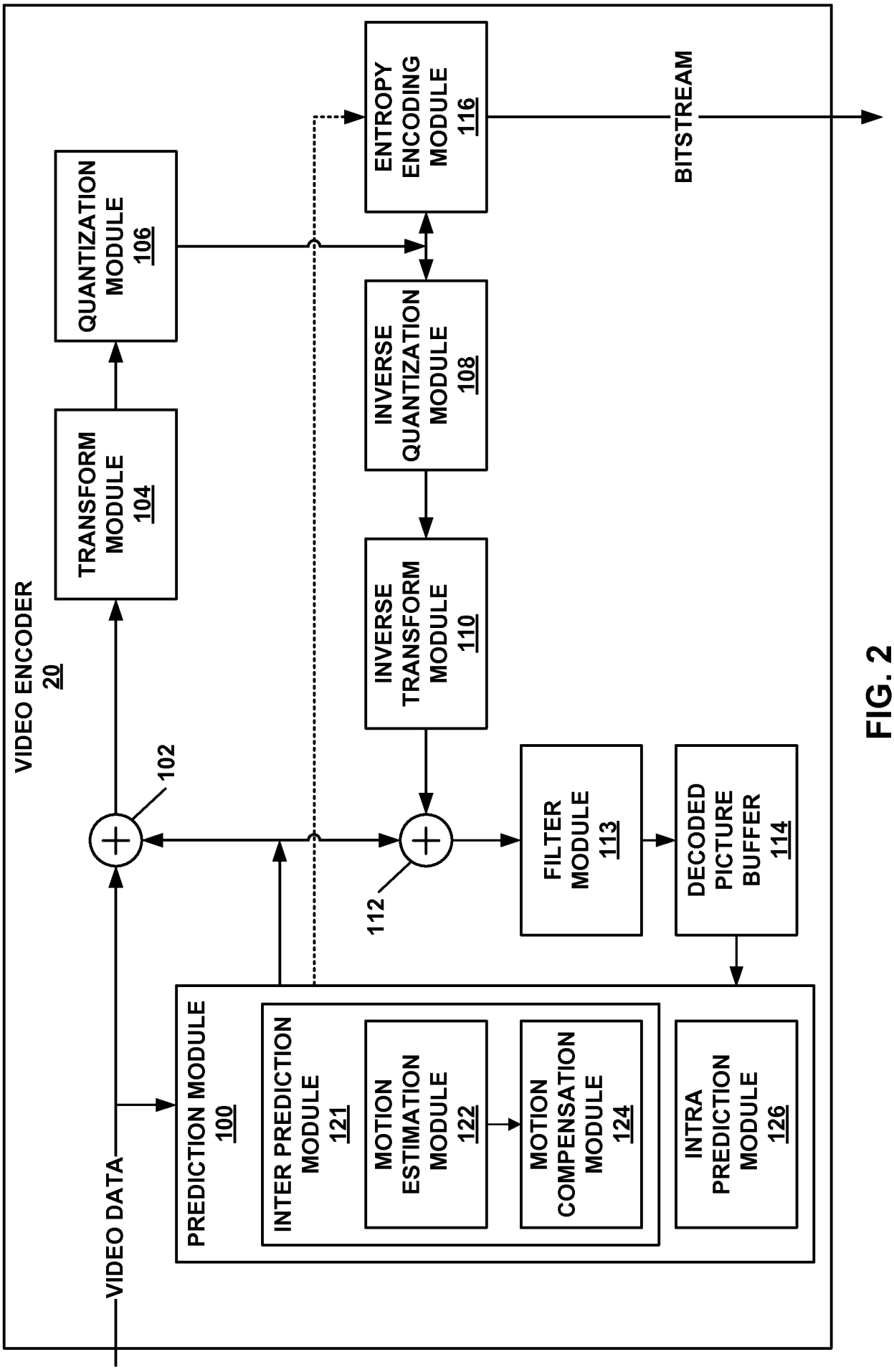

VIDEO ENCODER
20
VIDEO DATA
PREDICTION MODULE
100
INTER PREDICTION MODULE
121
MOTION ESTIMATION MODULE
122
MOTION COMPENSATION MODULE
124
INTRA PREDICTION MODULE
126
102
TRANSFORM MODULE
104
QUANTIZATION MODULE
106
INVERSE QUANTIZATION MODULE
108
INVERSE TRANSFORM MODULE
110
112
FILTER MODULE
113
DECODED PICTURE BUFFER
114
ENTROPY ENCODING MODULE
116
BITSTREAM

FIG. 2

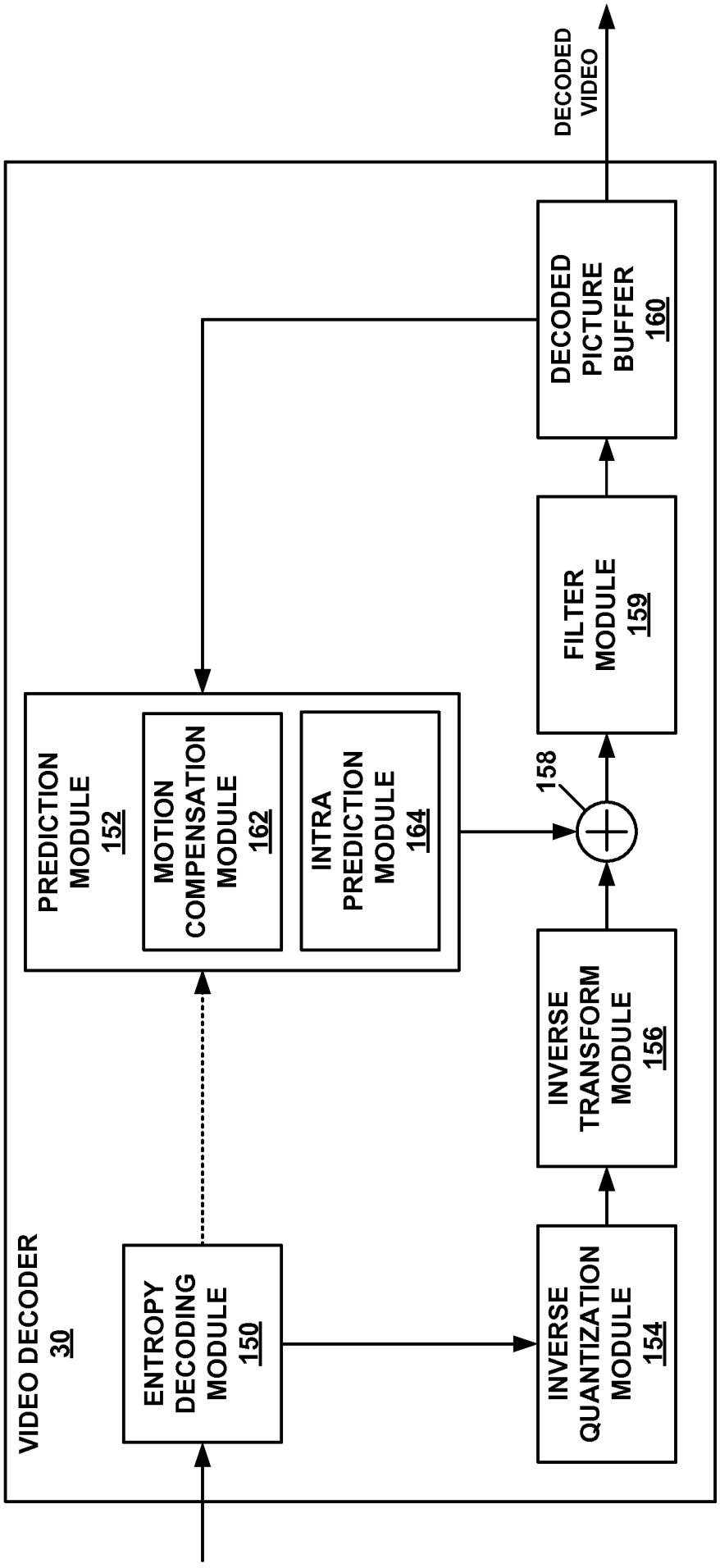

DECODED VIDEO
VIDEO DECODER 30
ENTROPY DECODING MODULE 150
INVERSE QUANTIZATION MODULE 154
INVERSE TRANSFORM MODULE 156
158
FILTER MODULE 159
DECODED PICTURE BUFFER 160
PREDICTION MODULE 152
MOTION COMPENSATION MODULE 162
INTRA PREDICTION MODULE 164

FIG. 3

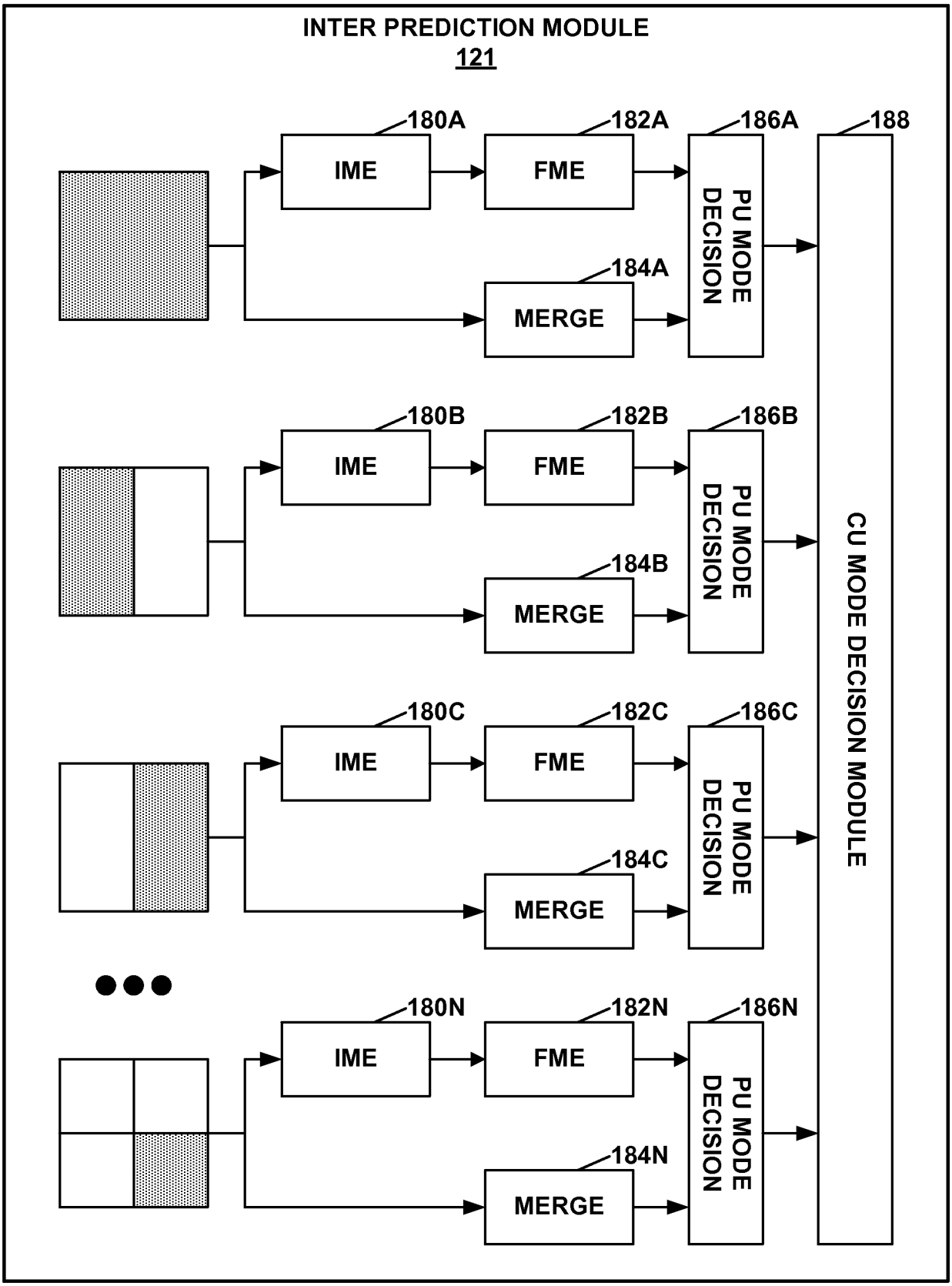

INTER PREDICTION MODULE
121
180A
IME
182A
FME
186A
PU MODE DECISION
184A
MERGE
188
CU MODE DECISION MODULE
180B
IME
182B
FME
186B
PU MODE DECISION
184B
MERGE
180C
IME
182C
FME
186C
PU MODE DECISION
184C
MERGE
180N
IME
182N
FME
186N
PU MODE DECISION
184N
MERGE

FIG. 4

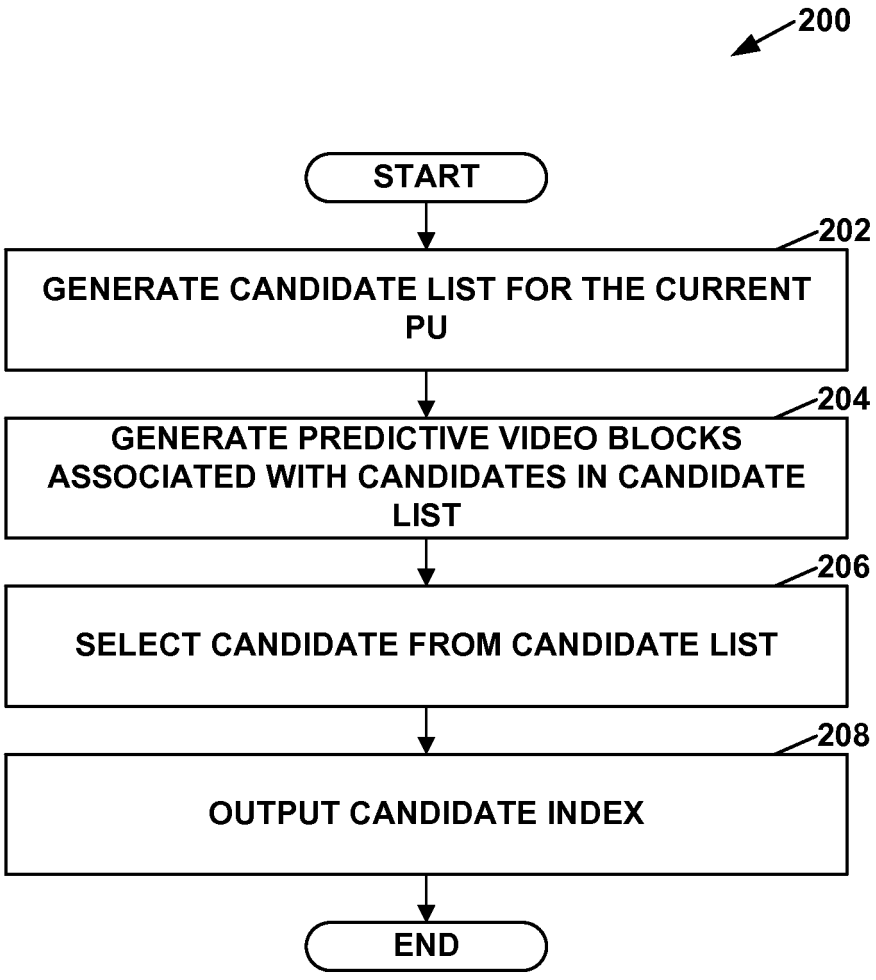

200
START
202
GENERATE CANDIDATE LIST FOR THE CURRENT PU
204
GENERATE PREDICTIVE VIDEO BLOCKS ASSOCIATED WITH CANDIDATES IN CANDIDATE LIST
206
SELECT CANDIDATE FROM CANDIDATE LIST
208
OUTPUT CANDIDATE INDEX
END

FIG. 5

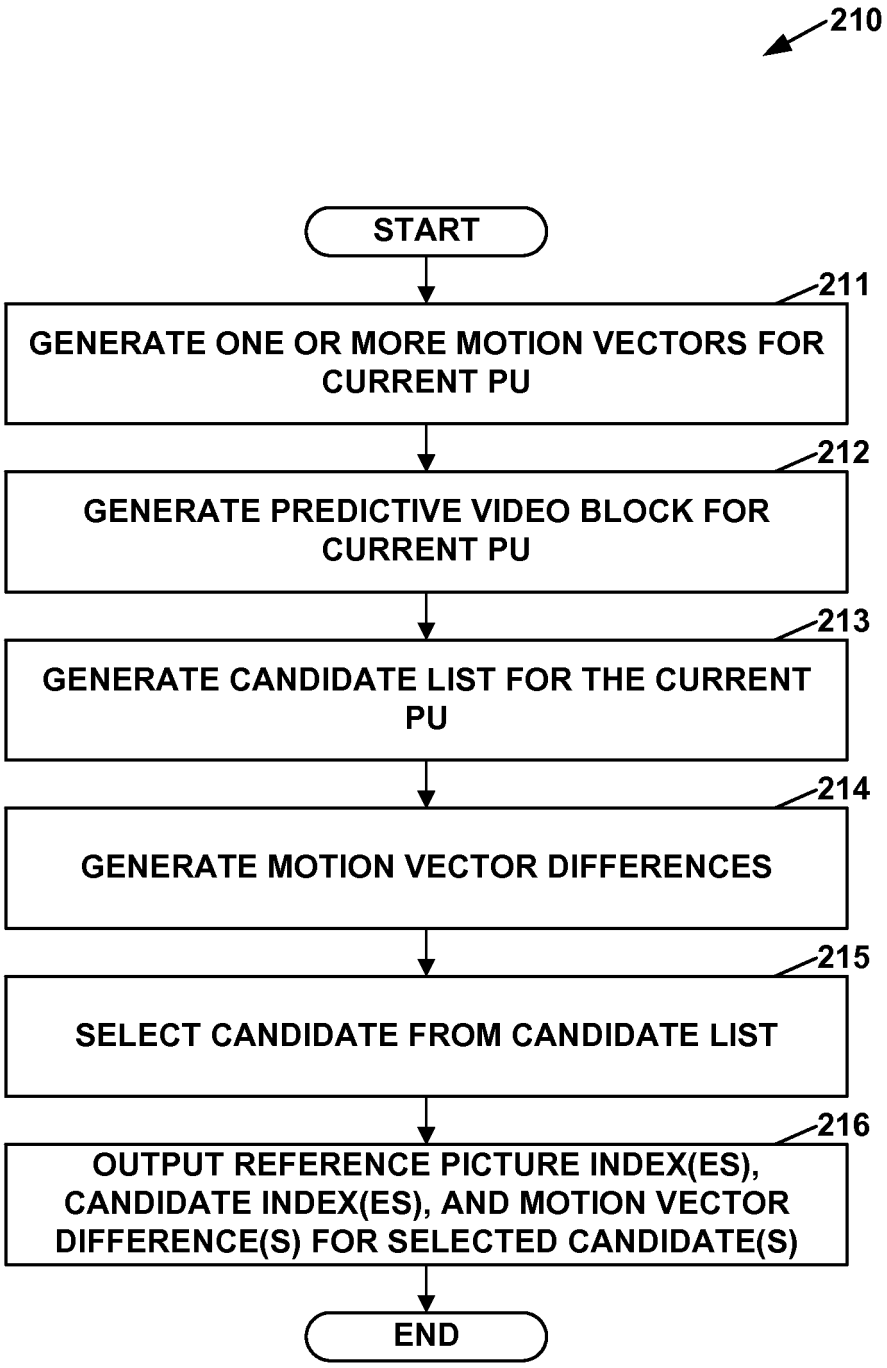

210
START
211
GENERATE ONE OR MORE MOTION VECTORS FOR CURRENT PU
212
GENERATE PREDICTIVE VIDEO BLOCK FOR CURRENT PU
213
GENERATE CANDIDATE LIST FOR THE CURRENT PU
214
GENERATE MOTION VECTOR DIFFERENCES
215
SELECT CANDIDATE FROM CANDIDATE LIST
216
OUTPUT REFERENCE PICTURE INDEX(ES), CANDIDATE INDEX(ES), AND MOTION VECTOR DIFFERENCE(S) FOR SELECTED CANDIDATE(S)
END

FIG. 6

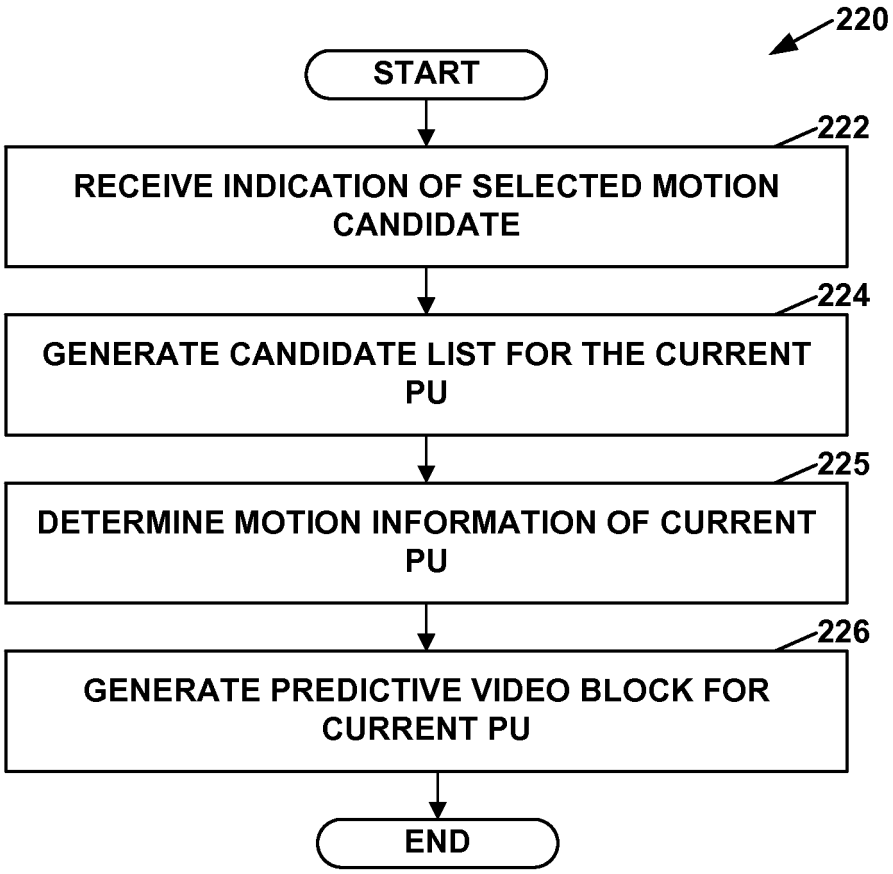

220
START
222
RECEIVE INDICATION OF SELECTED MOTION CANDIDATE
224
GENERATE CANDIDATE LIST FOR THE CURRENT PU
225
DETERMINE MOTION INFORMATION OF CURRENT PU
226
GENERATE PREDICTIVE VIDEO BLOCK FOR CURRENT PU
END

FIG. 7

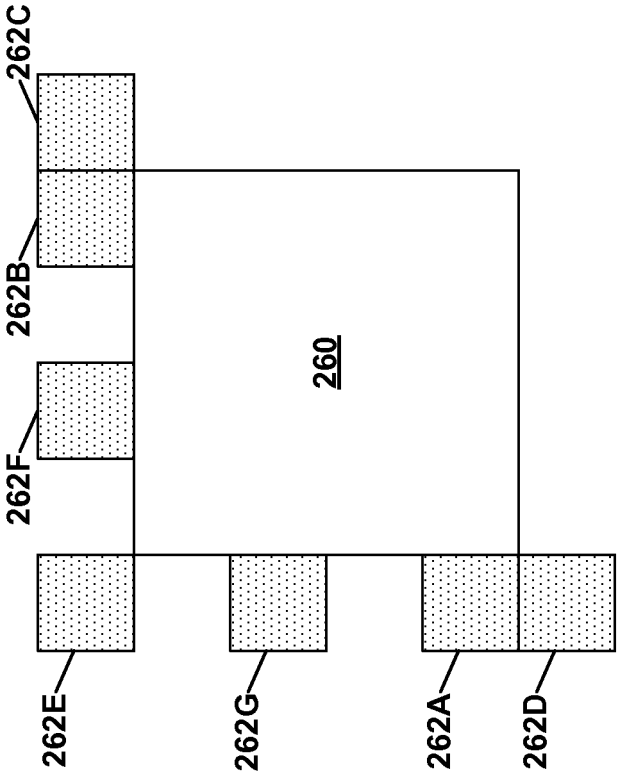

262C
262B
262F
260
262E
262G
262A
262D

FIG. 8B

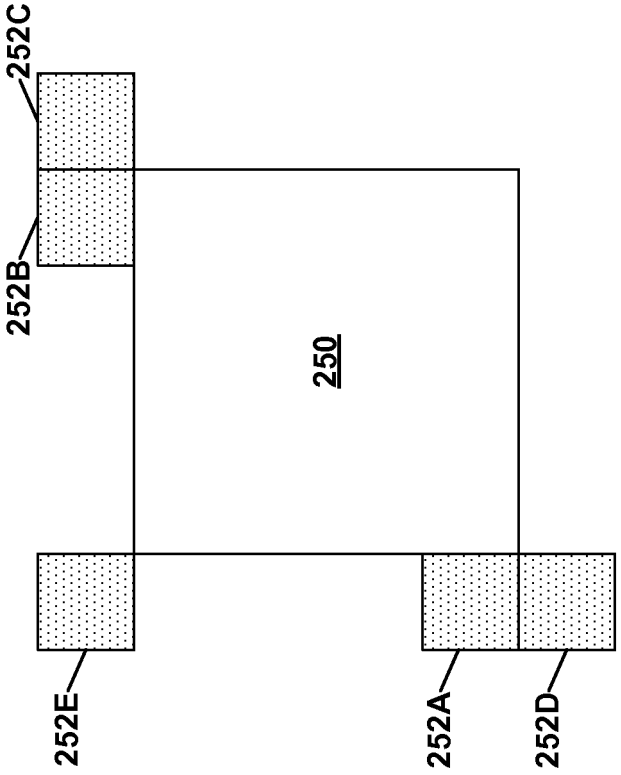

252C
252B
250
252E
252A
252D

FIG. 8A

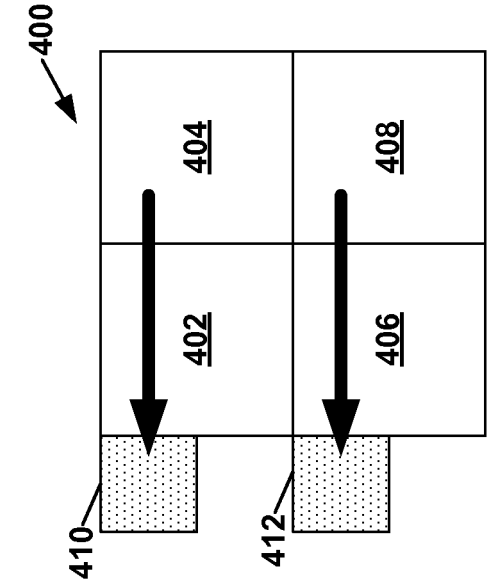


FIG. 9E

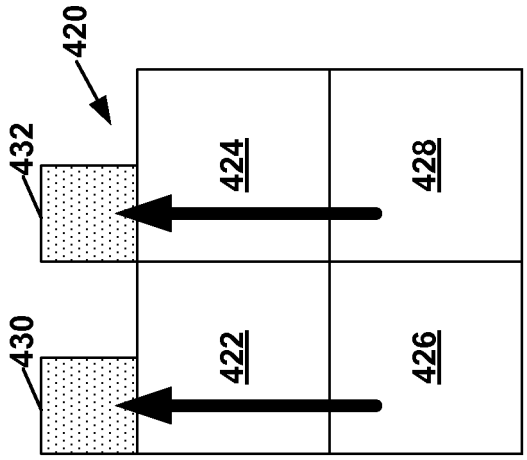


FIG. 9F

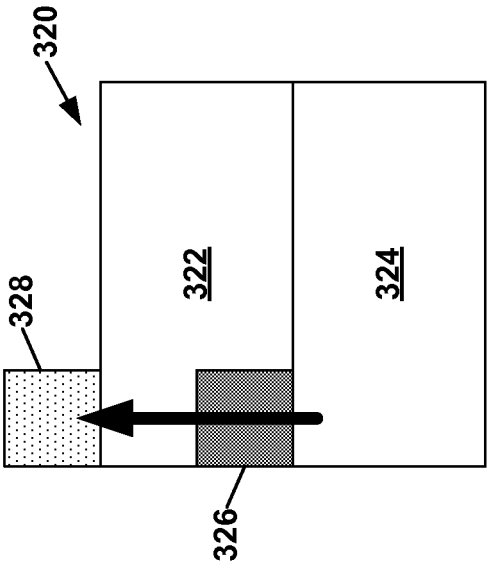


FIG. 9C

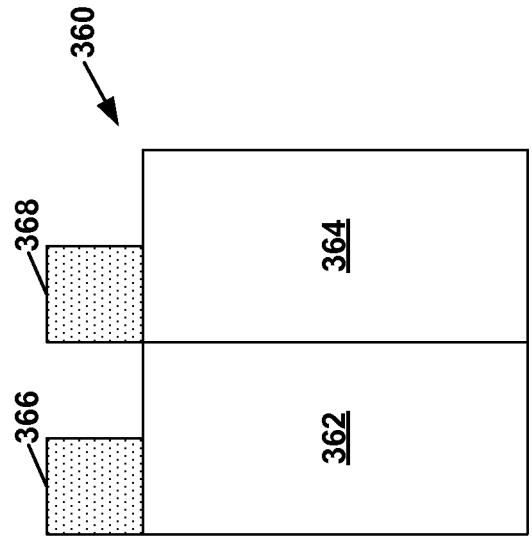


FIG. 9D

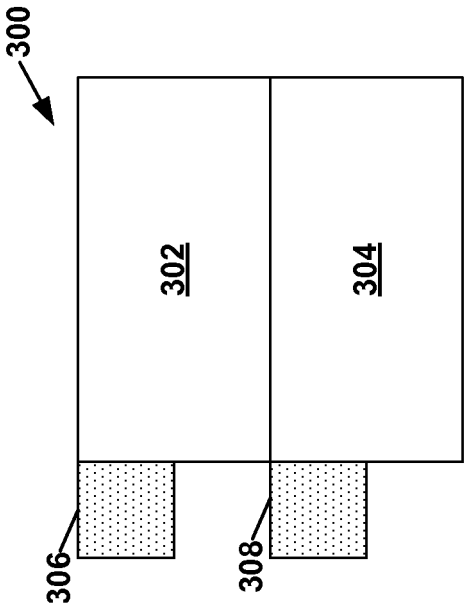


FIG. 9A

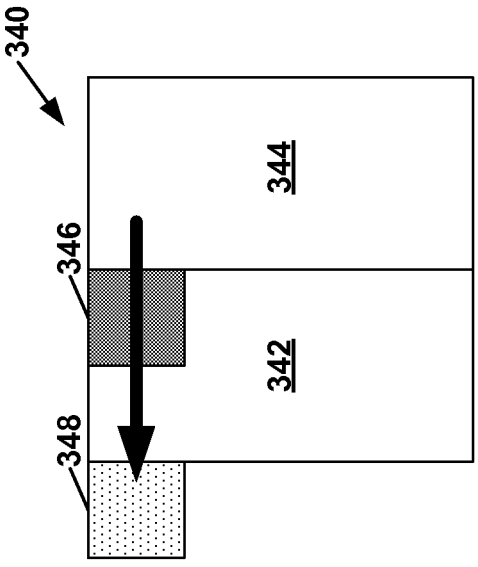


FIG. 9B

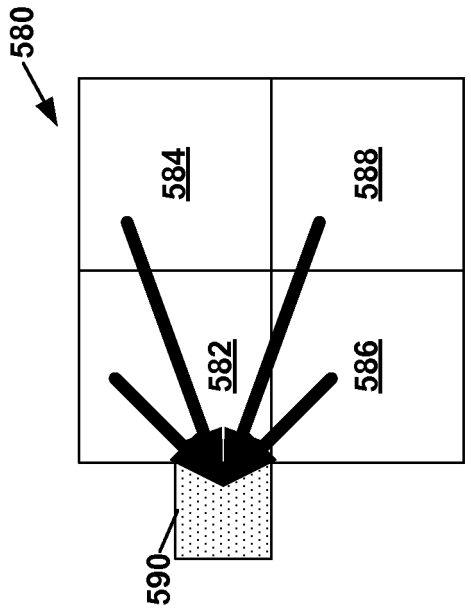


FIG. 10E

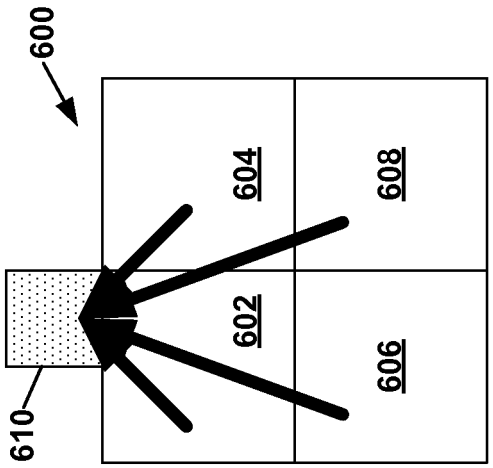


FIG. 10F

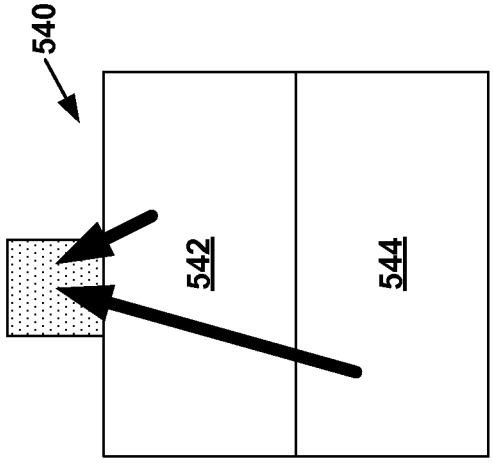


FIG. 10C

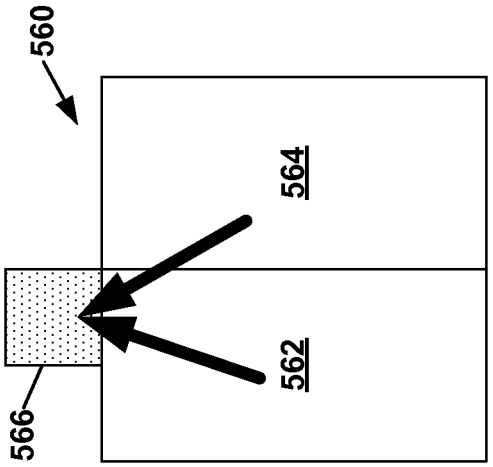


FIG. 10D

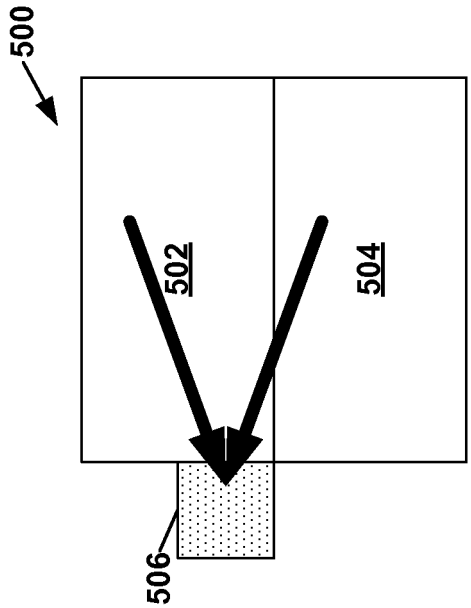


FIG. 10A

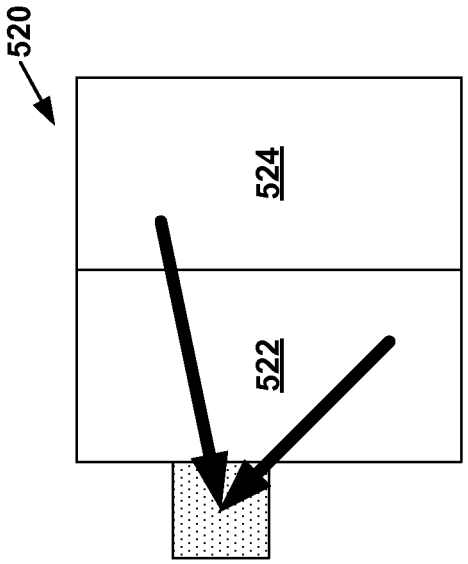


FIG. 10B

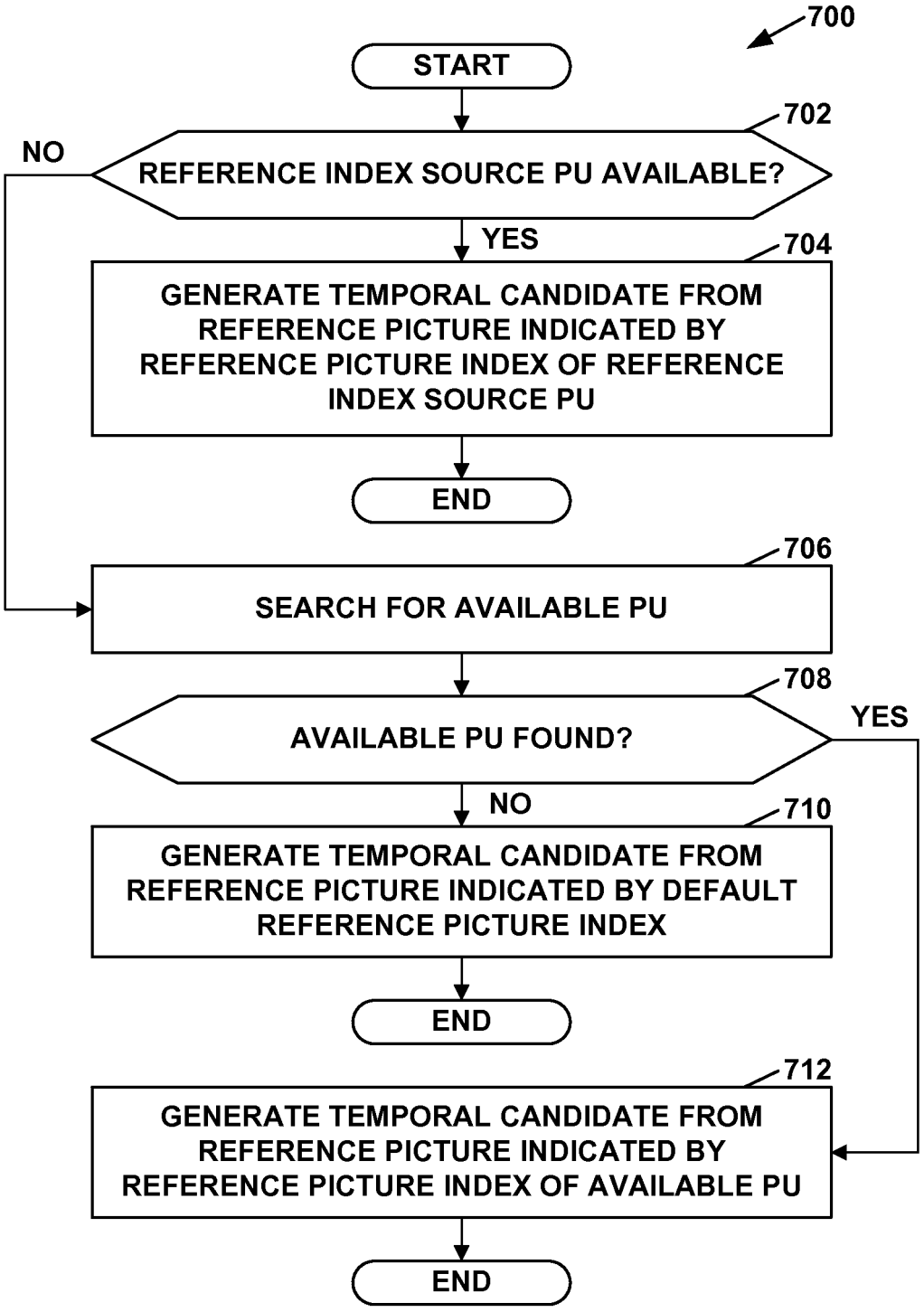

700
START
702
REFERENCE INDEX SOURCE PU AVAILABLE?
NO
YES
704
GENERATE TEMPORAL CANDIDATE FROM REFERENCE PICTURE INDICATED BY REFERENCE PICTURE INDEX OF REFERENCE INDEX SOURCE PU
END
706
SEARCH FOR AVAILABLE PU
708
AVAILABLE PU FOUND?
YES
NO
710
GENERATE TEMPORAL CANDIDATE FROM REFERENCE PICTURE INDICATED BY DEFAULT REFERENCE PICTURE INDEX
END
712
GENERATE TEMPORAL CANDIDATE FROM REFERENCE PICTURE INDICATED BY REFERENCE PICTURE INDEX OF AVAILABLE PU
END

FIG. 11

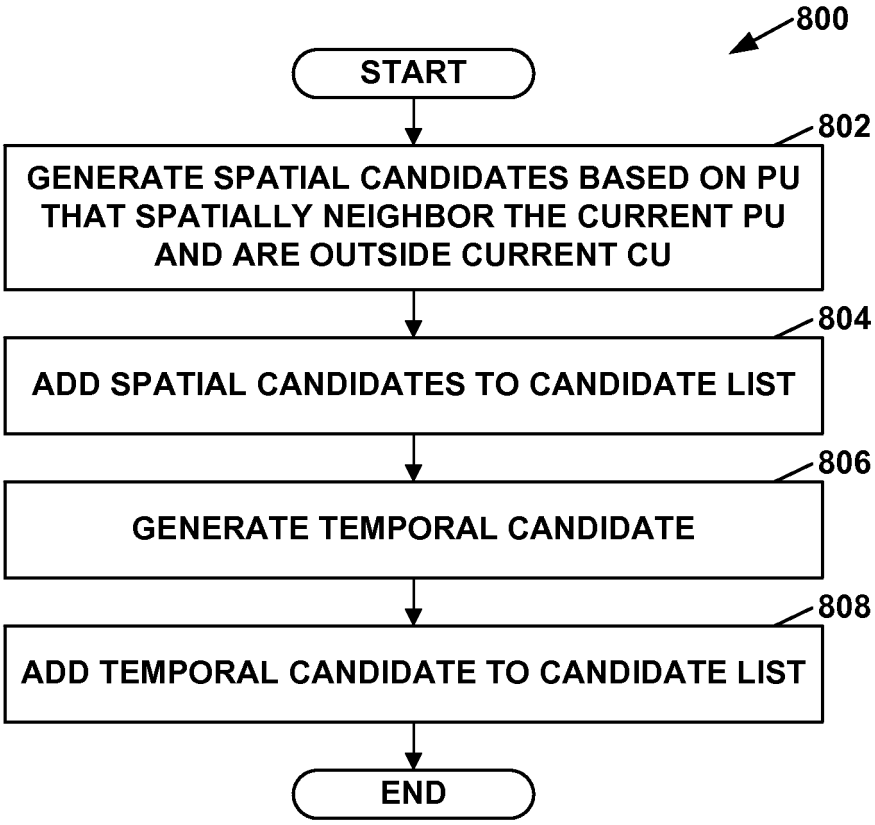

800
START
802
GENERATE SPATIAL CANDIDATES BASED ON PU THAT SPATIALLY NEIGHBOR THE CURRENT PU AND ARE OUTSIDE CURRENT CU
804
ADD SPATIAL CANDIDATES TO CANDIDATE LIST
806
GENERATE TEMPORAL CANDIDATE
808
ADD TEMPORAL CANDIDATE TO CANDIDATE LIST
END

FIG. 12

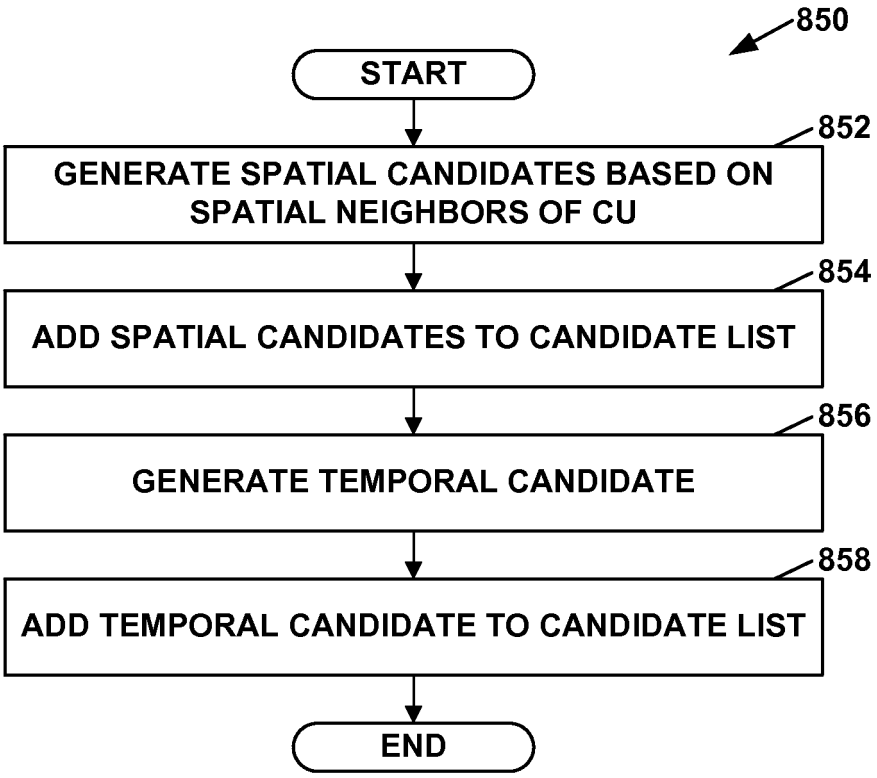

850
START
852
GENERATE SPATIAL CANDIDATES BASED ON SPATIAL NEIGHBORS OF CU
854
ADD SPATIAL CANDIDATES TO CANDIDATE LIST
856
GENERATE TEMPORAL CANDIDATE
858
ADD TEMPORAL CANDIDATE TO CANDIDATE LIST
END

FIG. 13

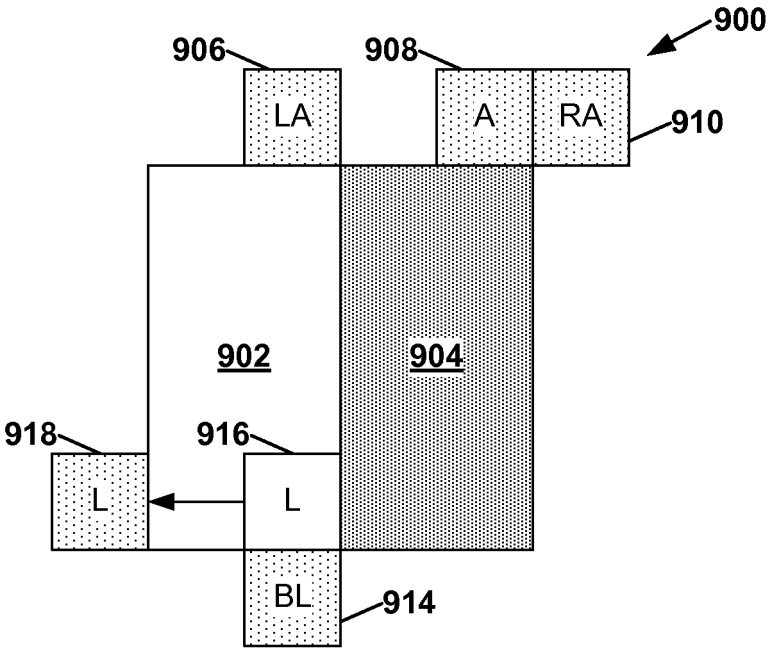


FIG. 14A

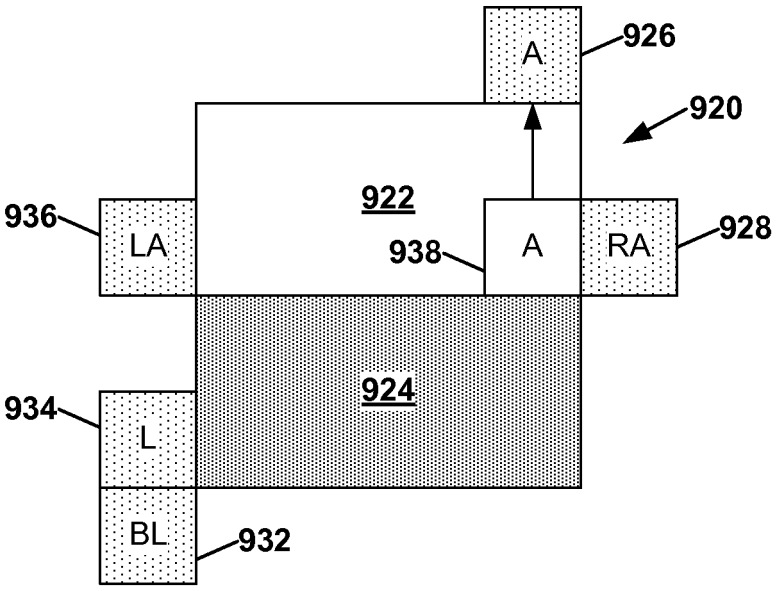


FIG. 14B

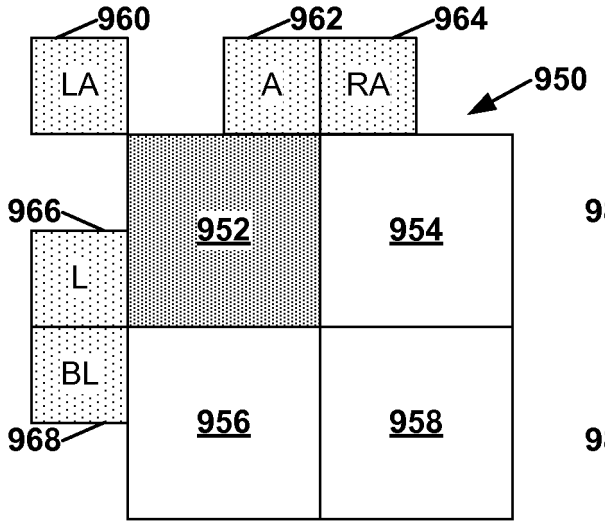


FIG. 15A

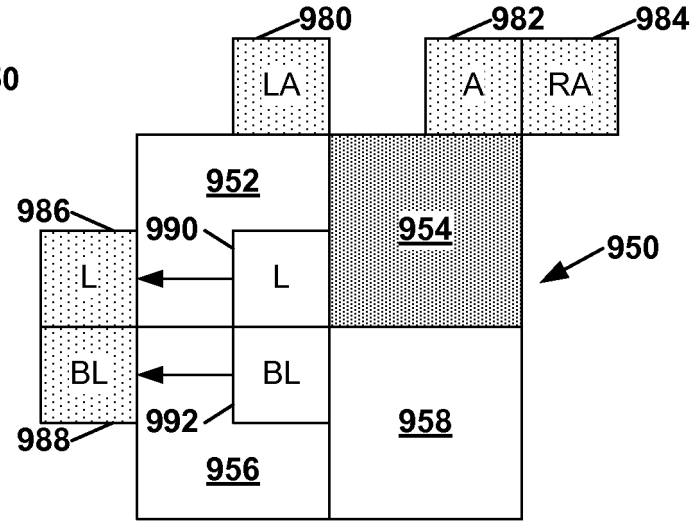


FIG. 15B

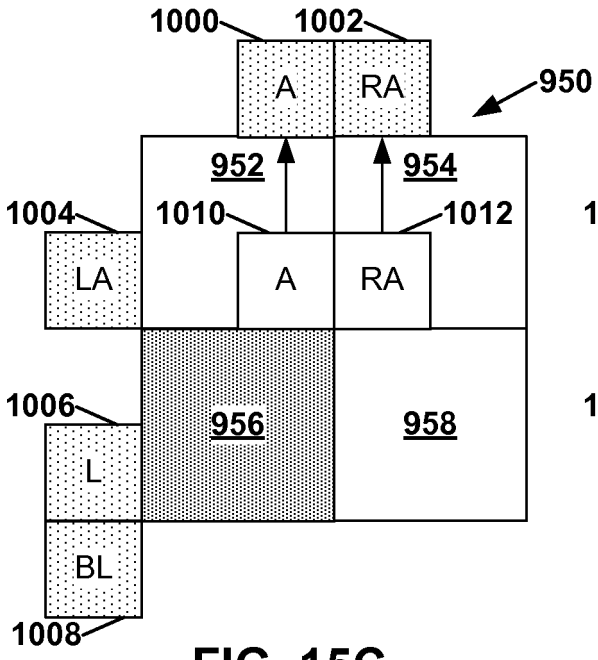


FIG. 15C

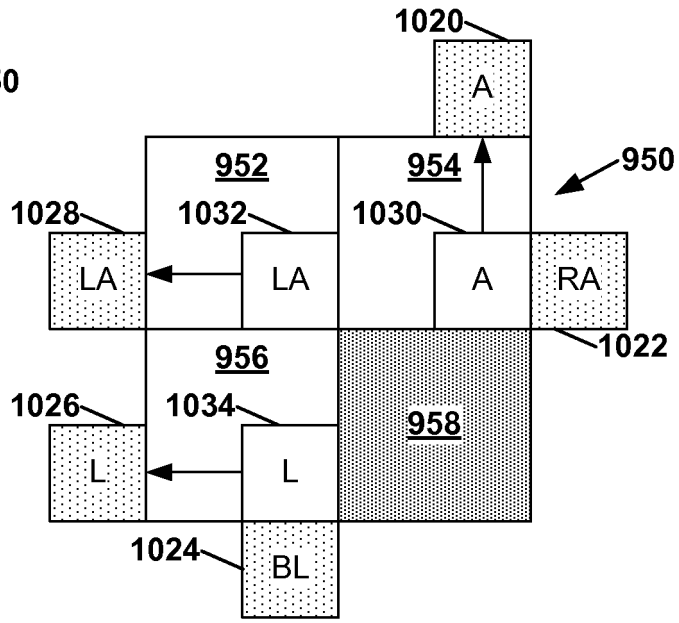


FIG. 15D