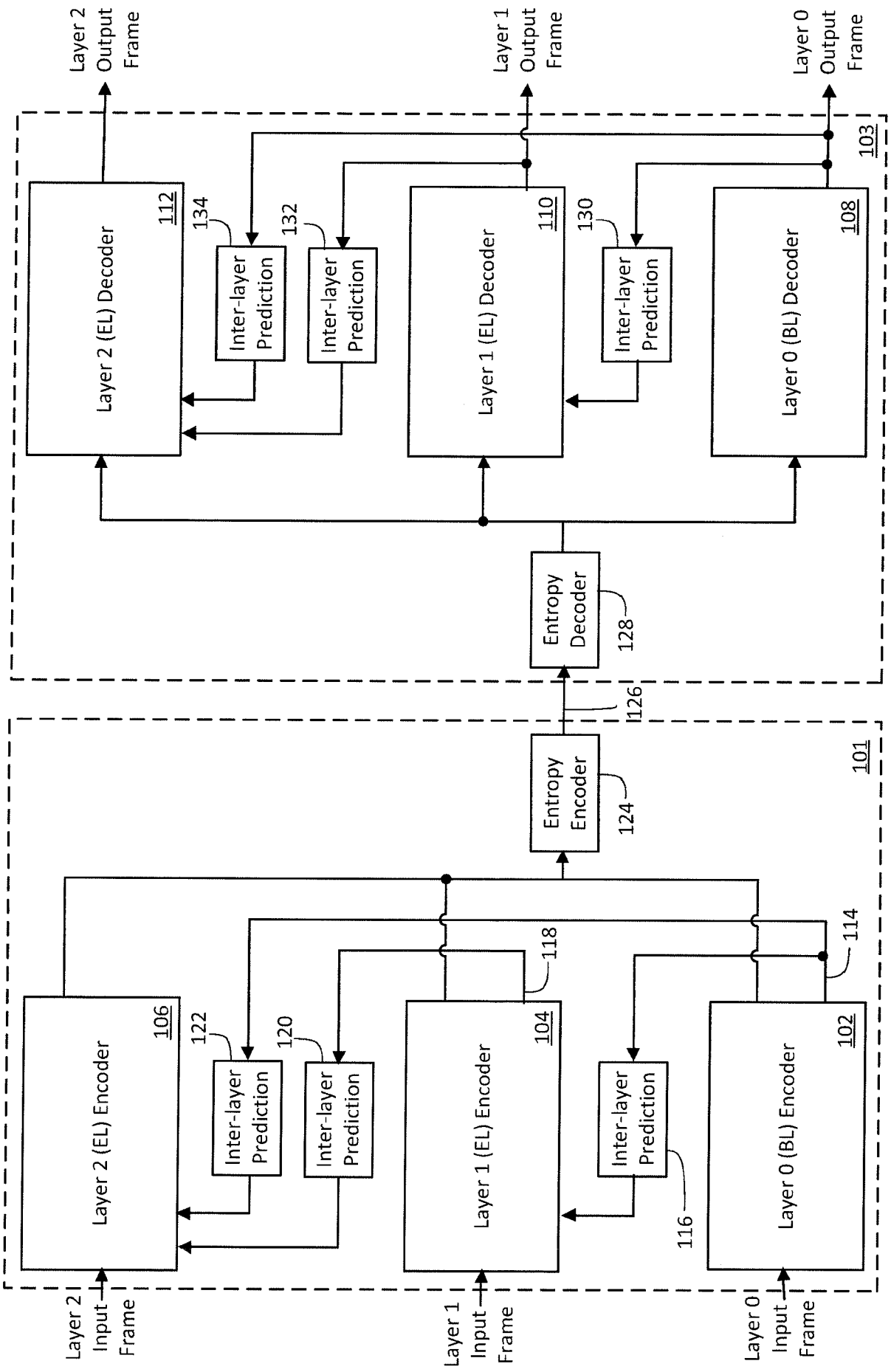

Layer 2 Output Frame
Layer 1 Output Frame
Layer 0 Output Frame
103
Layer 2 (EL) Decoder
112
Layer 1 (EL) Decoder
110
Layer 0 (BL) Decoder
108
Inter-layer Prediction
134
Inter-layer Prediction
132
Inter-layer Prediction
130
Entropy Decoder
128
126
Entropy Encoder
124
101
100
Layer 2 (EL) Encoder
106
Layer 1 (EL) Encoder
104
Layer 0 (BL) Encoder
102
Inter-layer Prediction
122
Inter-layer Prediction
120
Inter-layer Prediction
116
118
114
Layer 2 Input Frame
Layer 1 Input Frame
Layer 0 Input Frame

FIG. 1

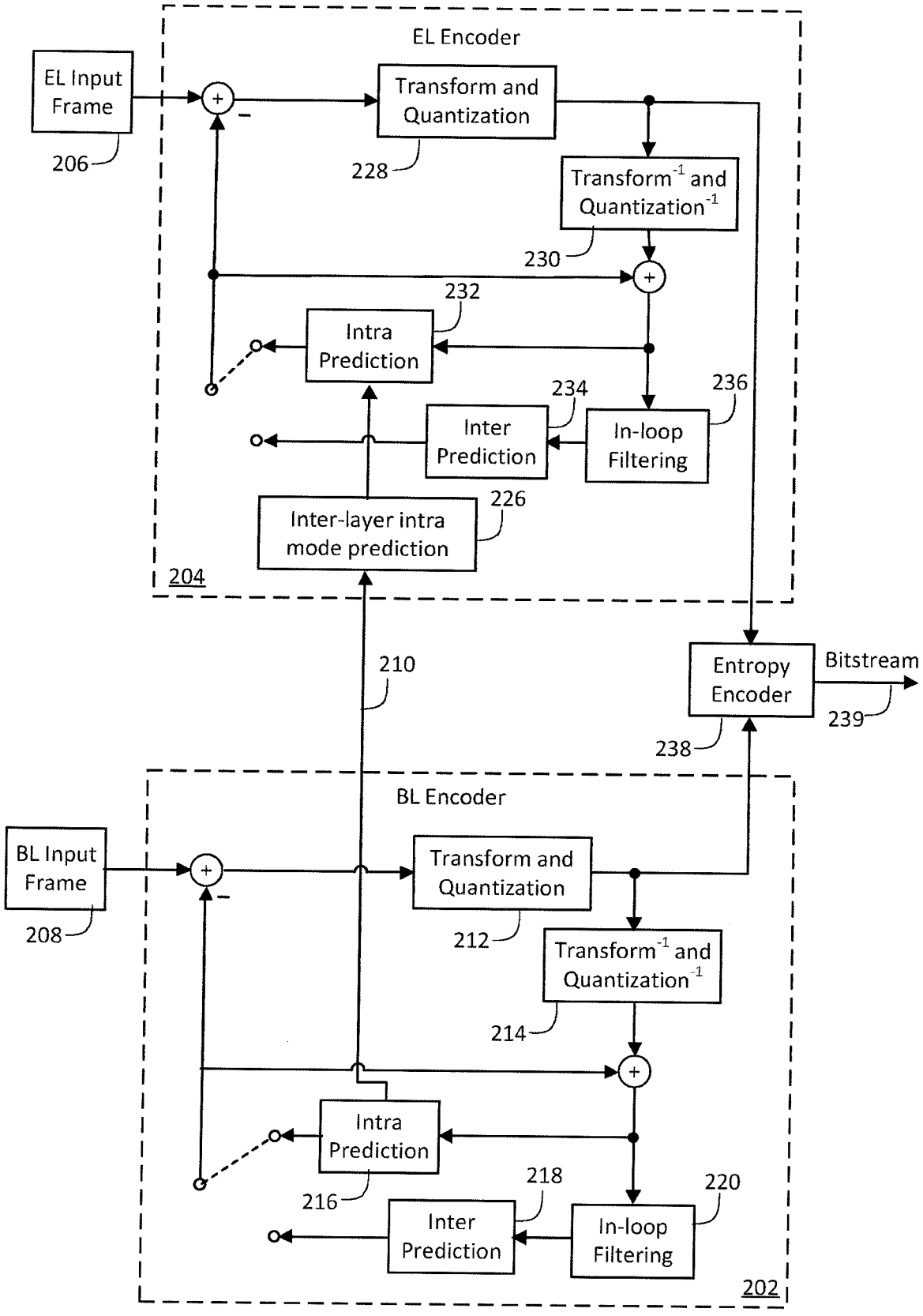

EL Encoder
EL Input Frame
206
Transform and Quantization
228
Transform^{-1} and Quantization^{-1}
230
232
Intra Prediction
234
Inter Prediction
236
In-loop Filtering
226
Inter-layer intra mode prediction
204
210
Entropy Encoder
Bitstream
239
238
BL Encoder
BL Input Frame
208
Transform and Quantization
212
Transform^{-1} and Quantization^{-1}
214
Intra Prediction
216
218
Inter Prediction
220
In-loop Filtering
202
200

FIG. 2

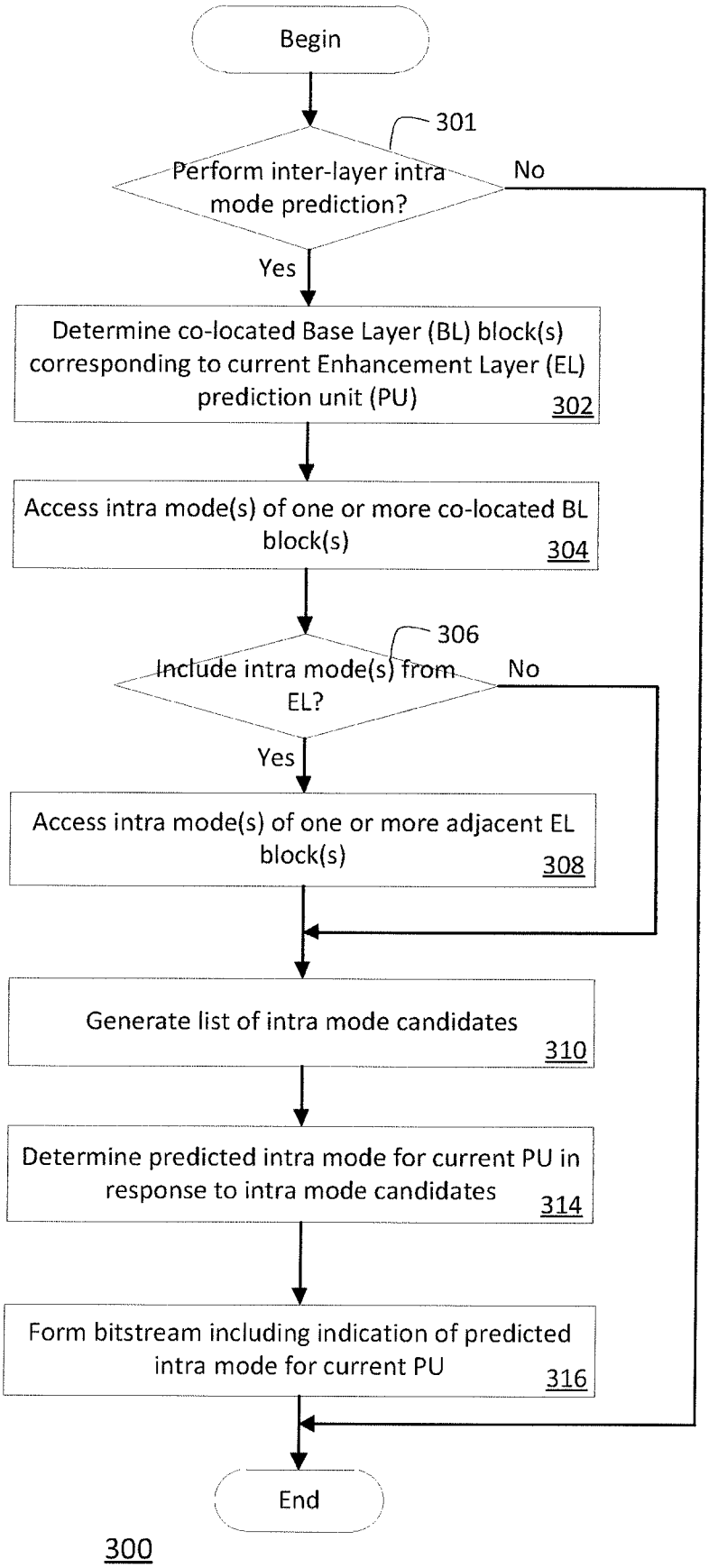
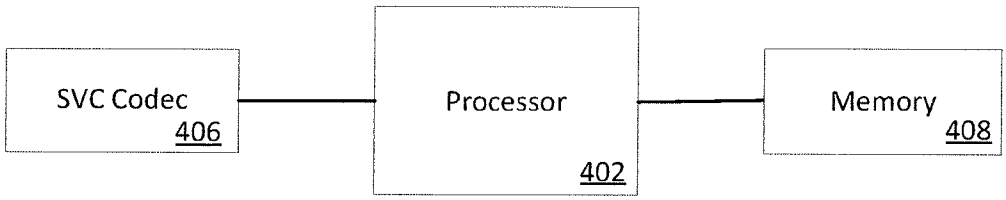

Begin
301
Perform inter-layer intra mode prediction?
No
Yes
Determine co-located Base Layer (BL) block(s) corresponding to current Enhancement Layer (EL) prediction unit (PU)
302
Access intra mode(s) of one or more co-located BL block(s)
304
306
Include intra mode(s) from EL?
No
Yes
Access intra mode(s) of one or more adjacent EL block(s)
308
Generate list of intra mode candidates
310
Determine predicted intra mode for current PU in response to intra mode candidates
314
Form bitstream including indication of predicted intra mode for current PU
316
End
300

FIG. 3



400

FIG. 4

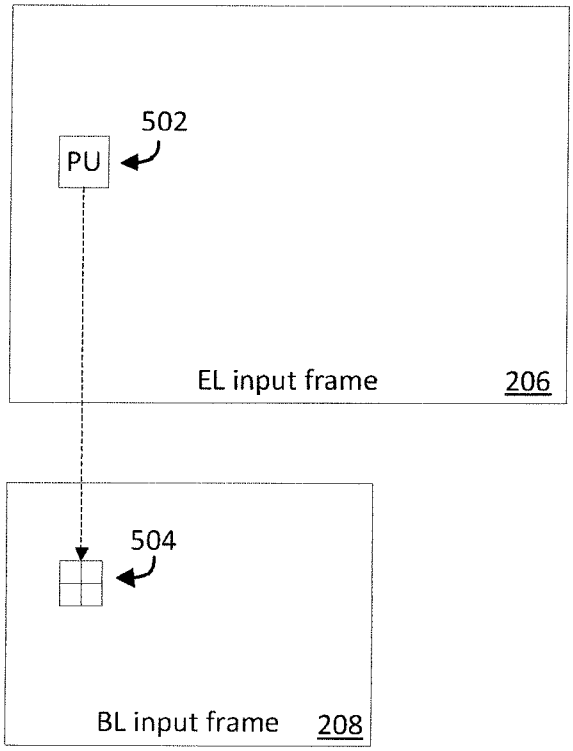


FIG. 5

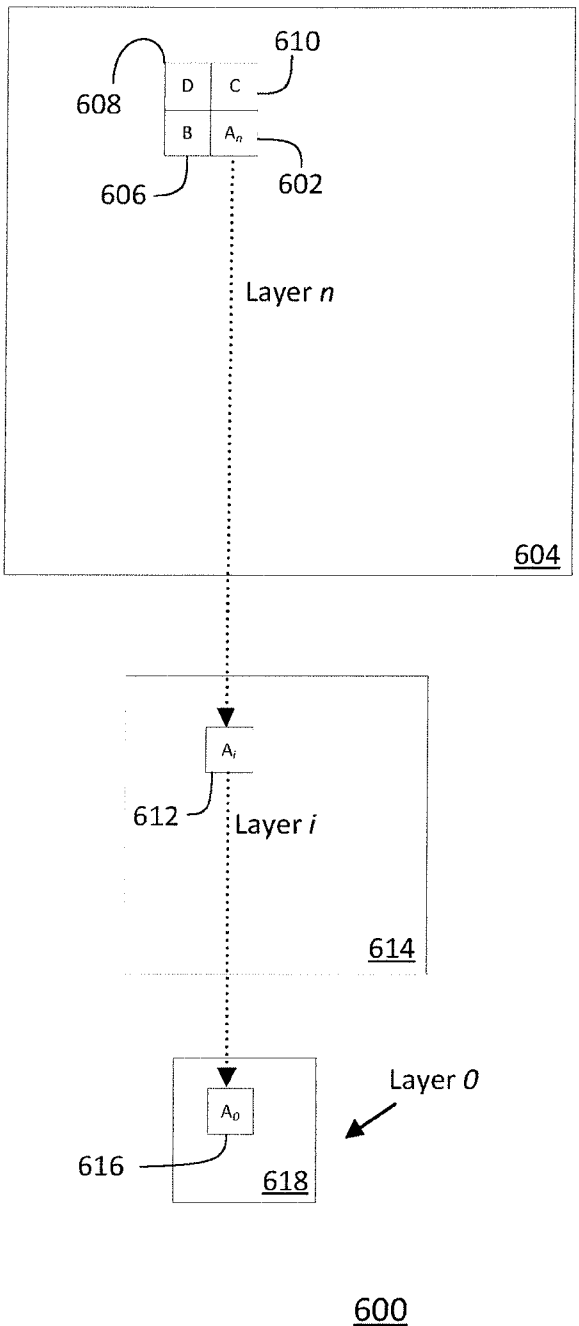
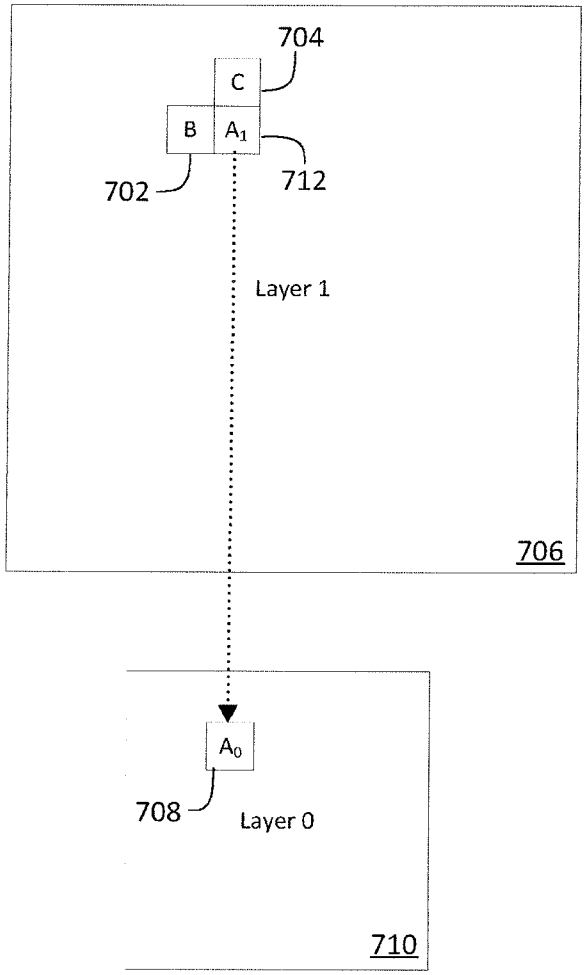

610
608
D
C
B
A_n
606
602
Layer *n*
604
A_i
612
Layer *i*
614
Layer *0*
A_0
616
618
600

FIG. 6



700

FIG. 7

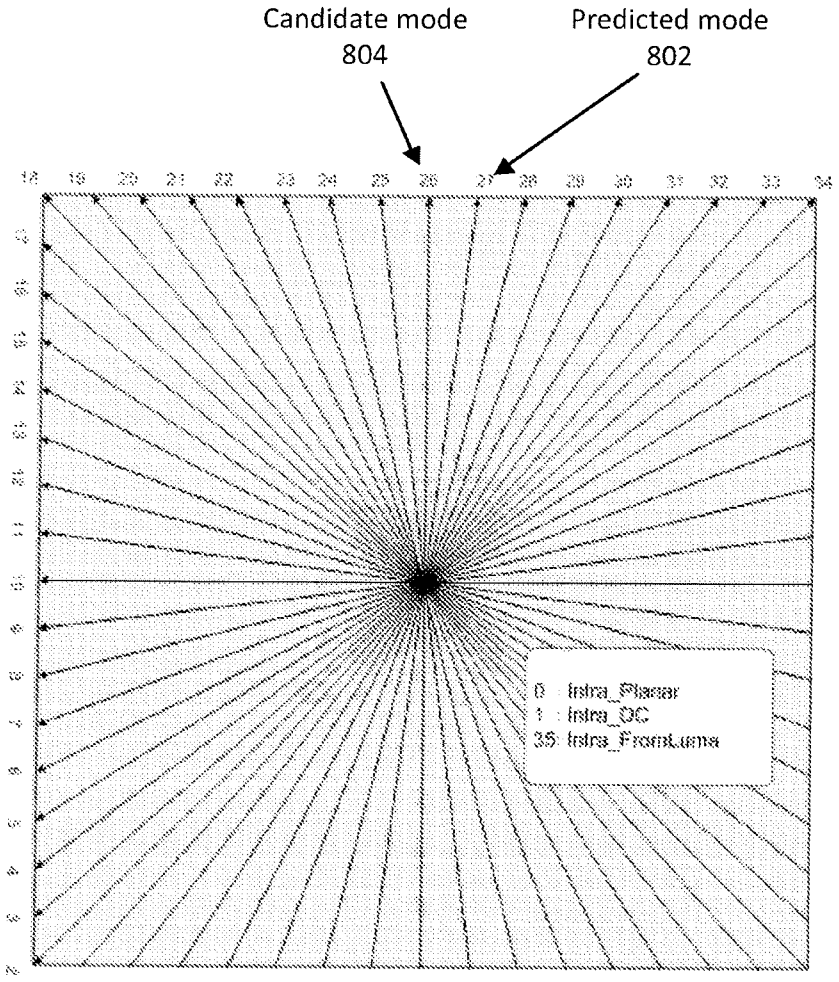

Candidate mode
804
Predicted mode
802
0 Intra_Planar
1 Intra_DC
35 Intra_FromLuma

FIG. 8

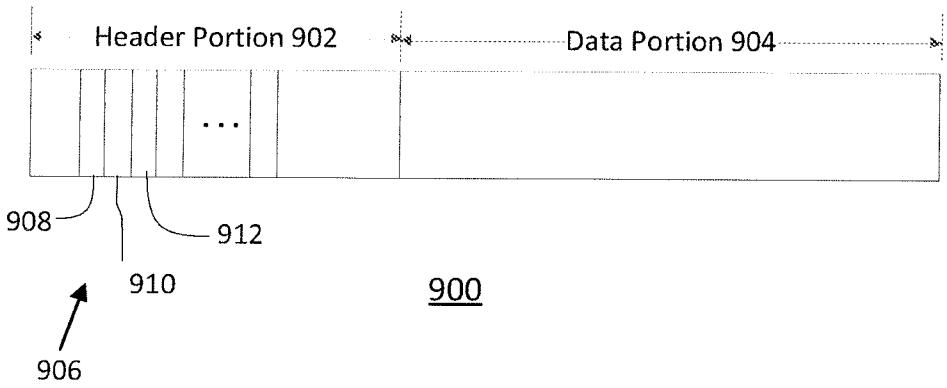

Header Portion 902
Data Portion 904
908
912
910
900
906

FIG. 9

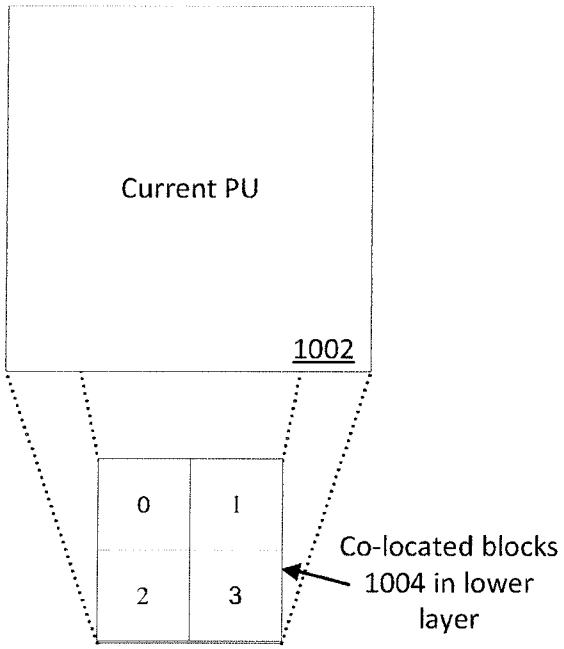
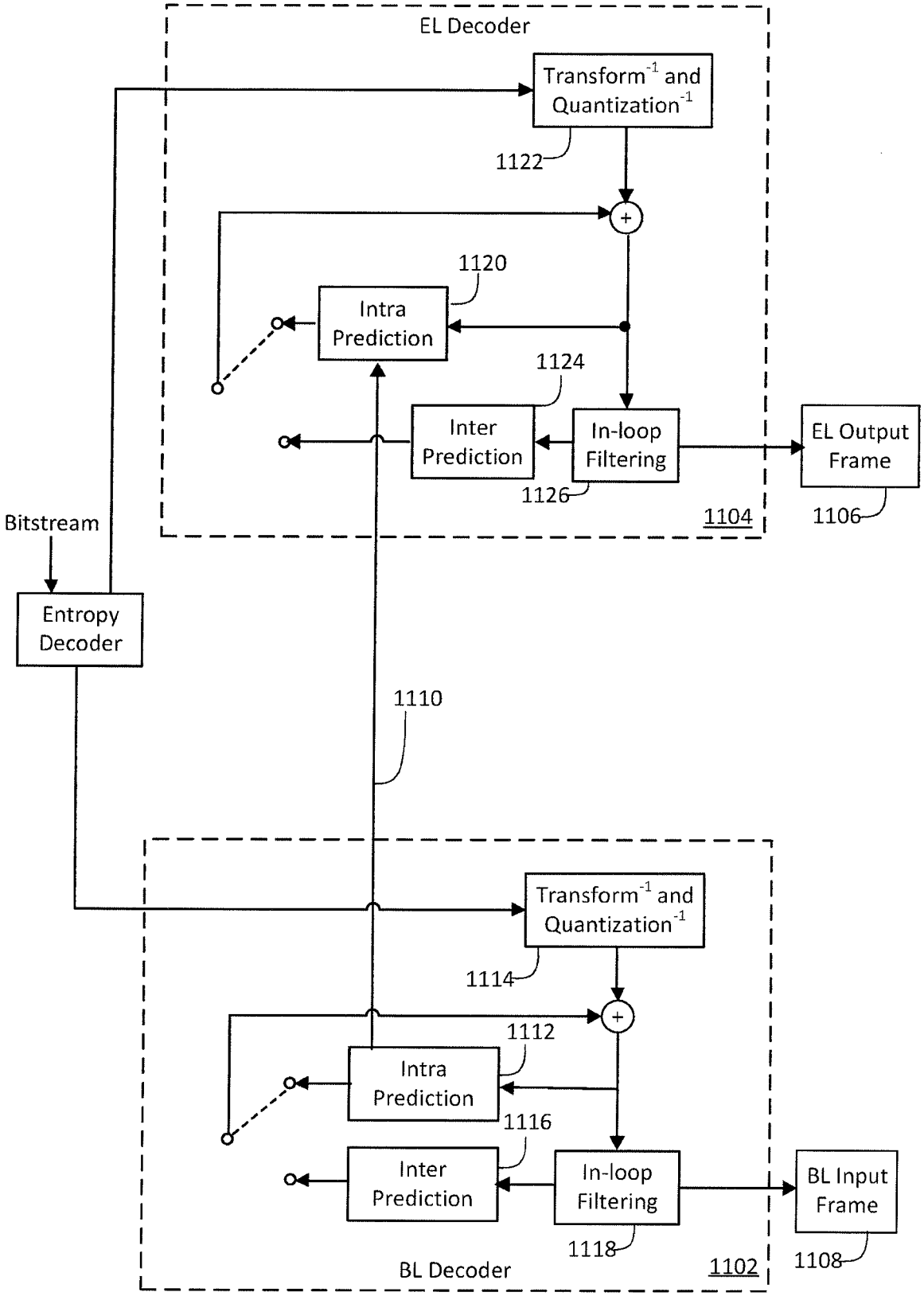

Current PU
1002
0
1
2
3
Co-located blocks 1004 in lower layer
1000

FIG. 10


EL Decoder
Transform-1 and Quantization-1
1122
+
1120
Intra Prediction
1124
Inter Prediction
In-loop Filtering
1126
EL Output Frame
1106
1104
Bitstream
Entropy Decoder
1110
Transform-1 and Quantization-1
1114
+
1112
Intra Prediction
1116
Inter Prediction
In-loop Filtering
1118
BL Input Frame
1108
BL Decoder
1102

1100

FIG. 11

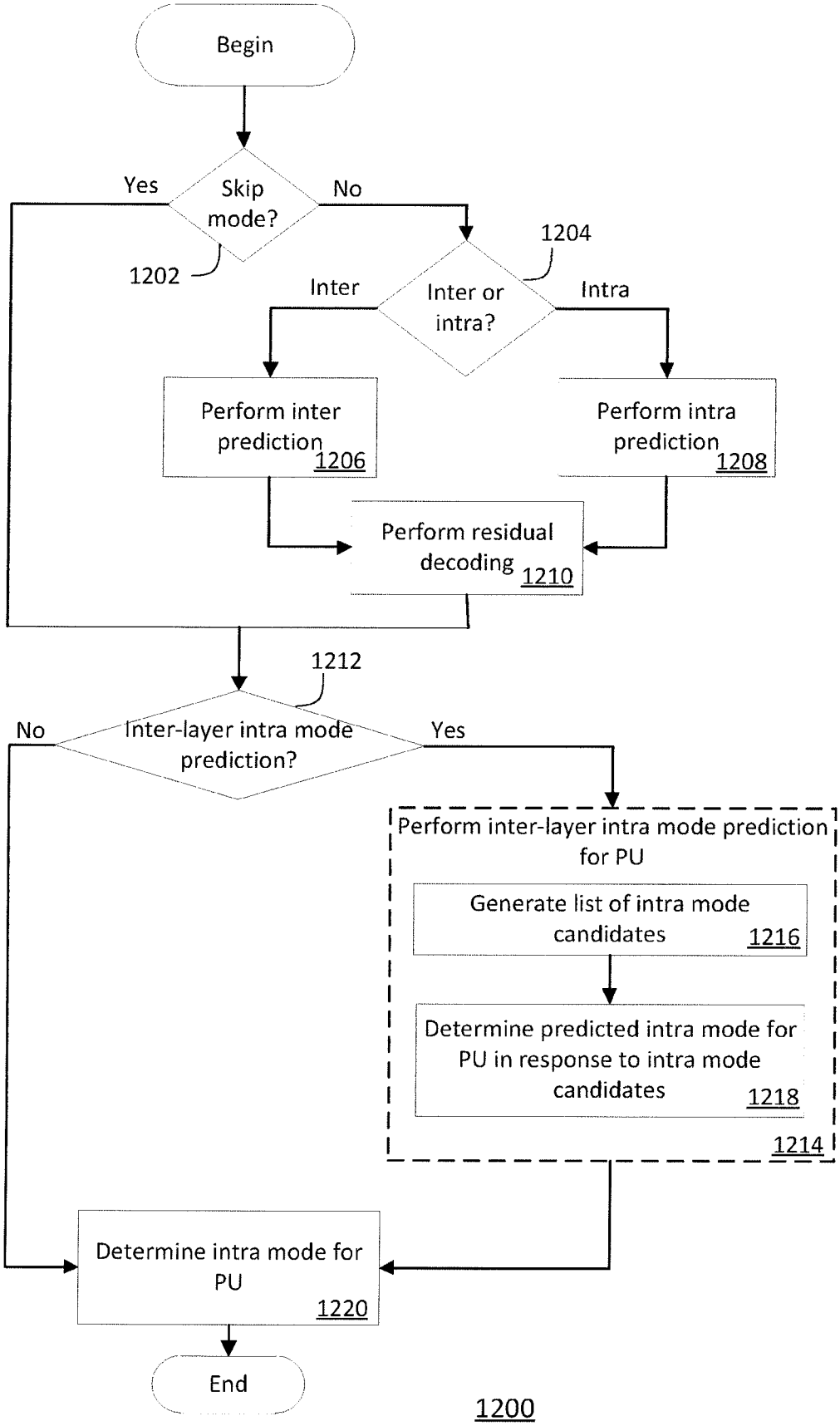

Begin
Skip mode?
Yes
No
1202
1204
Inter or intra?
Inter
Intra
Perform inter prediction 1206
Perform intra prediction 1208
Perform residual decoding 1210
1212
Inter-layer intra mode prediction?
No
Yes
Perform inter-layer intra mode prediction for PU
Generate list of intra mode candidates 1216
Determine predicted intra mode for PU in response to intra mode candidates 1218
1214
Determine intra mode for PU 1220
End
1200

FIG. 12

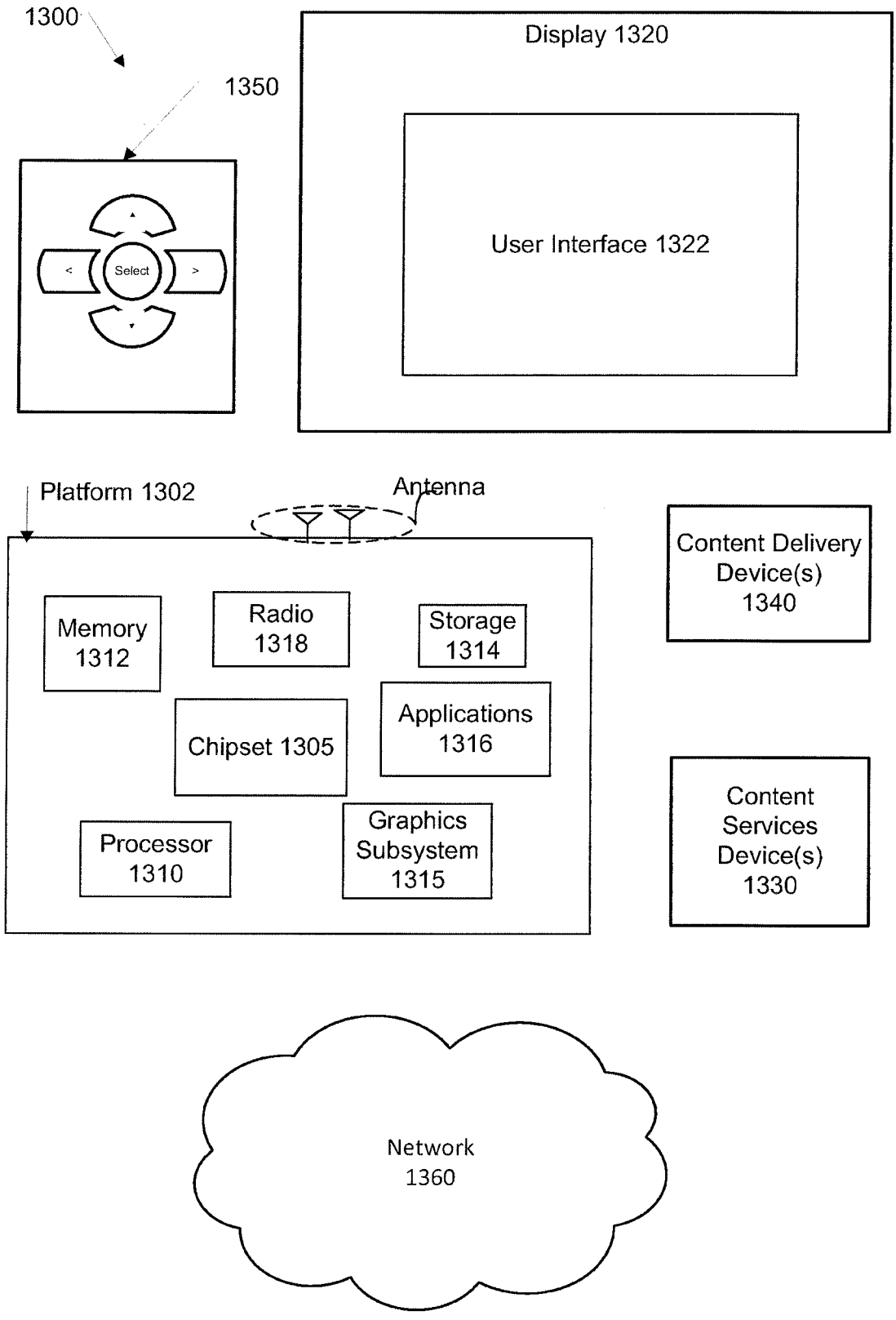

1300
1350
Display 1320
User Interface 1322
Select
Platform 1302
Antenna
Memory 1312
Radio 1318
Storage 1314
Chipset 1305
Applications 1316
Processor 1310
Graphics Subsystem 1315
Content Delivery Device(s) 1340
Content Services Device(s) 1330
Network 1360

FIG. 13

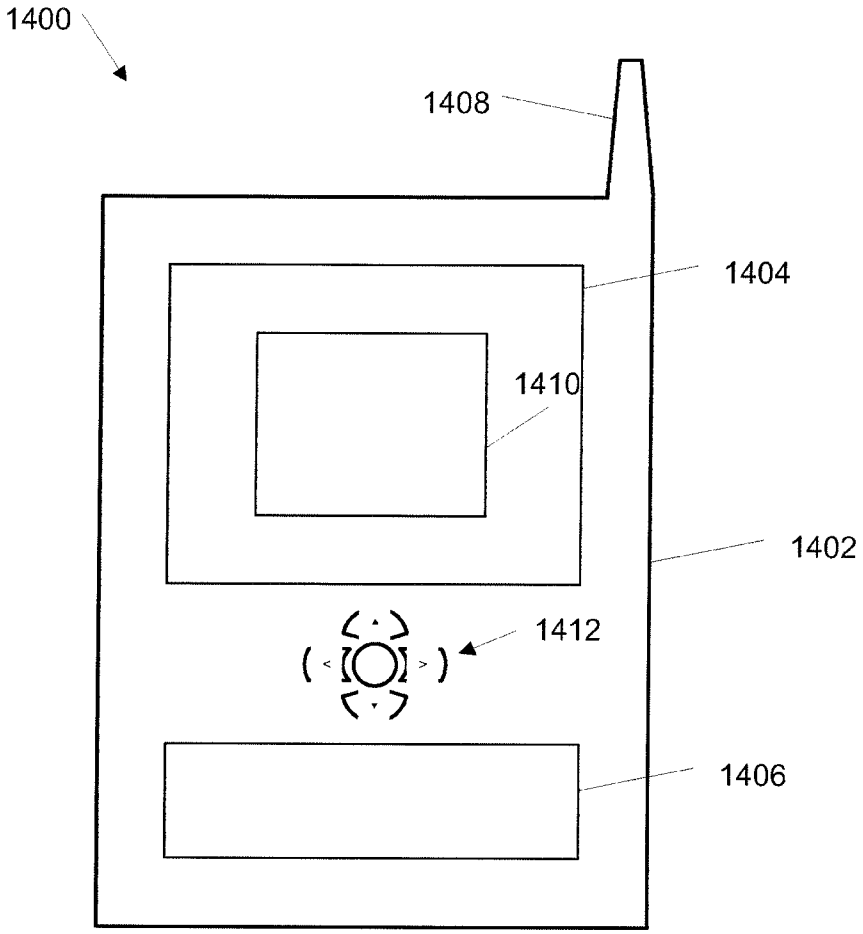


FIG. 14