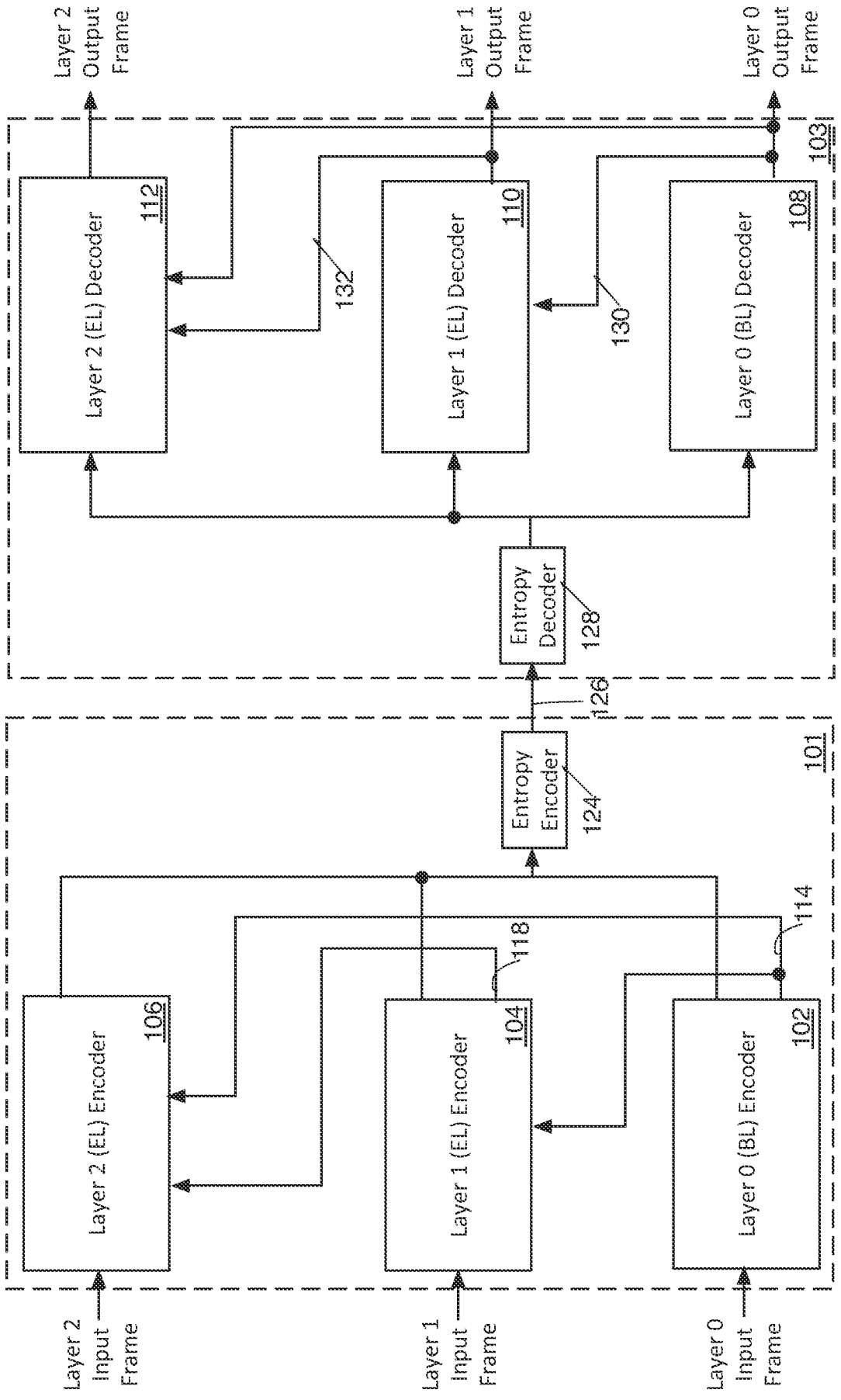
Layer 2 Output Frame
Layer 1 Output Frame
Layer 0 Output Frame
103
Layer 2 (EL) Decoder
112
Layer 1 (EL) Decoder
110
Layer 0 (BL) Decoder
108
132
130
Entropy Decoder
128
126
100
101
Entropy Encoder
124
114
118
Layer 2 (EL) Encoder
106
Layer 1 (EL) Encoder
104
Layer 0 (BL) Encoder
102
Layer 2 Input Frame
Layer 1 Input Frame
Layer 0 Input Frame

FIG. 1

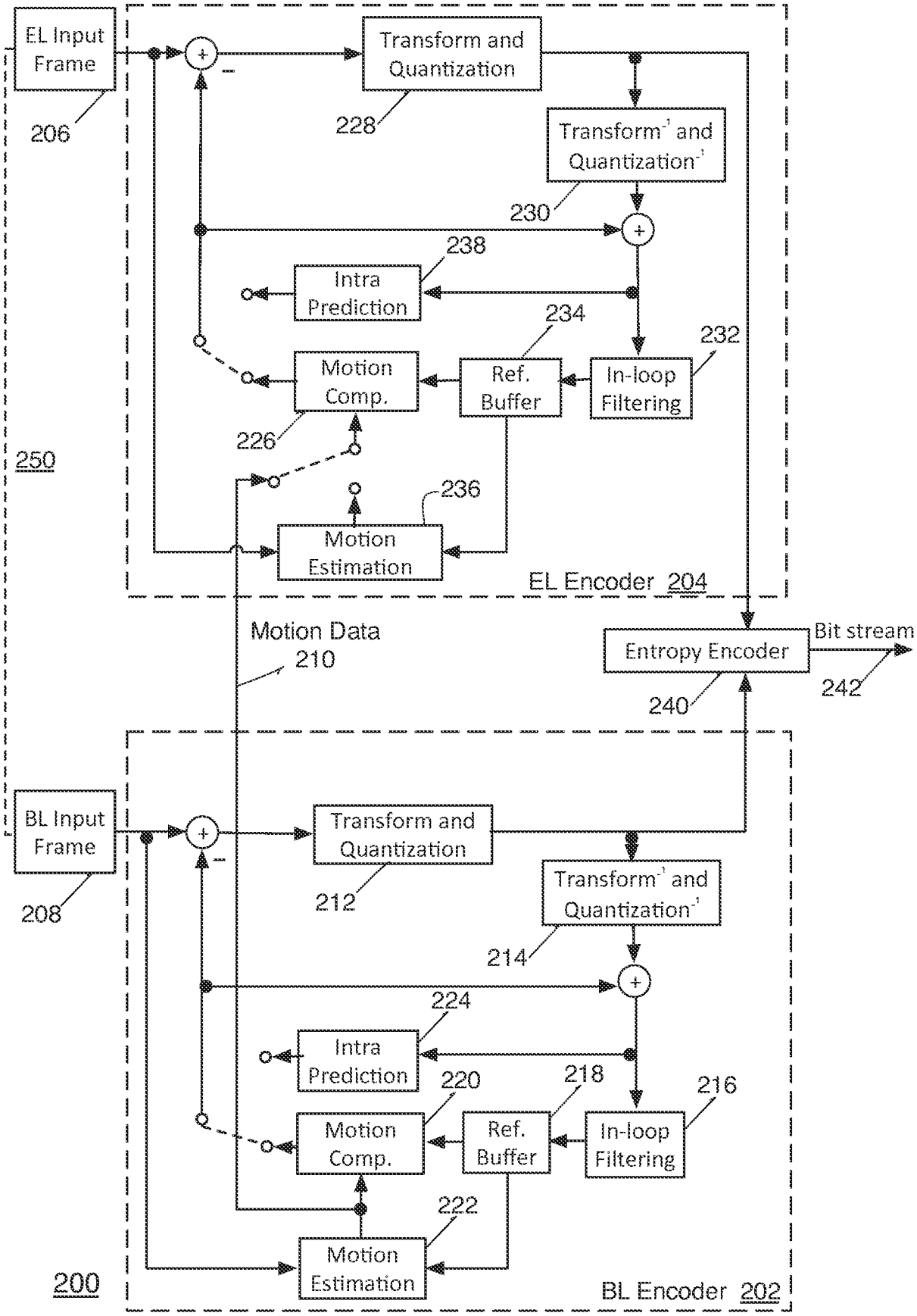
EL Input Frame
206
Transform and Quantization
228
Transform-1 and Quantization-1
230
238
Intra Prediction
234
232
Motion Comp.
Ref. Buffer
In-loop Filtering
226
250
236
Motion Estimation
EL Encoder 204
Motion Data
210
Entropy Encoder
Bit stream
240
242
BL Input Frame
208
Transform and Quantization
212
Transform-1 and Quantization-1
214
224
Intra Prediction
220
218
216
Motion Comp.
Ref. Buffer
In-loop Filtering
222
Motion Estimation
200
BL Encoder 202

FIG. 2

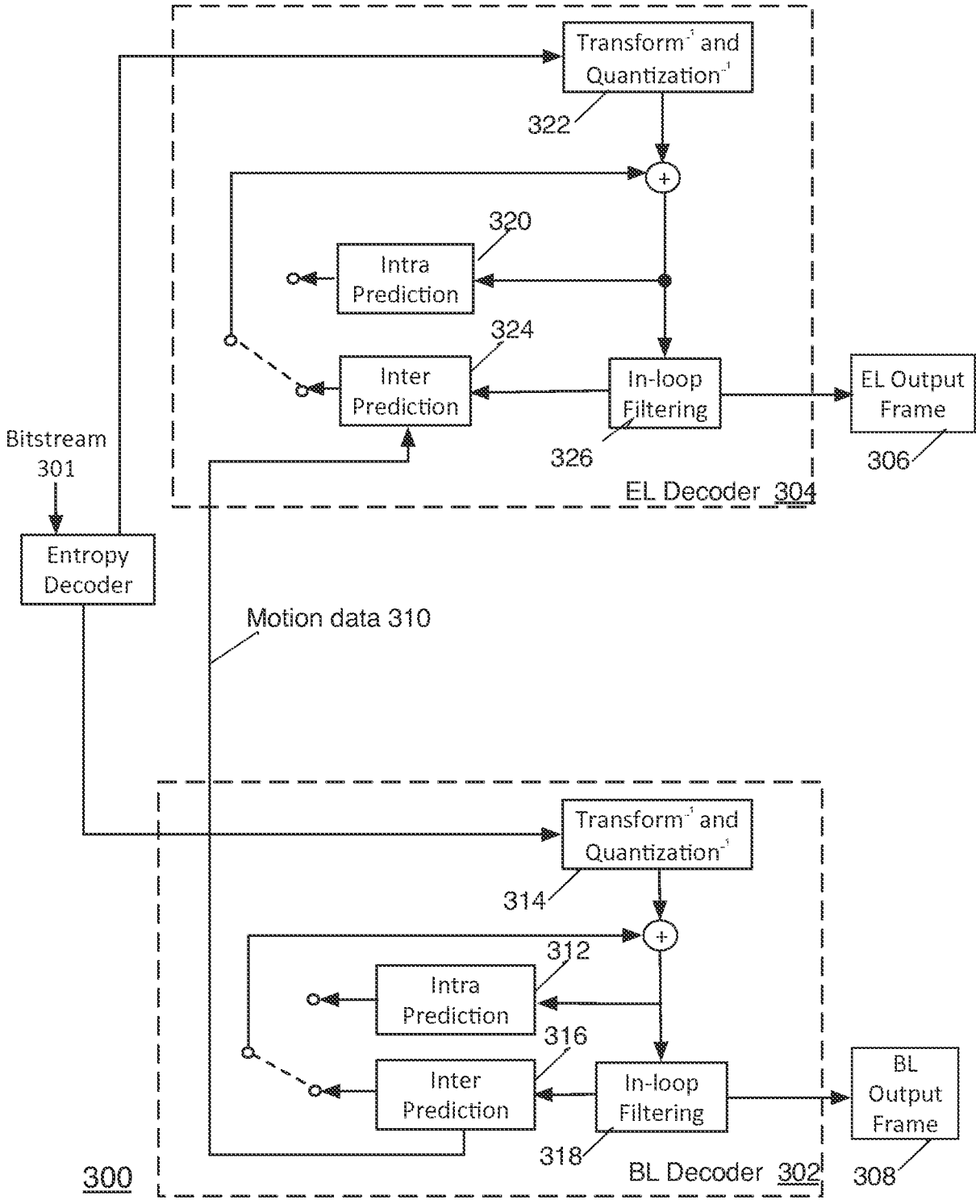
Transform-1 and Quantization-1
322
320
Intra Prediction
324
Inter Prediction
In-loop Filtering
326
EL Output Frame
306
EL Decoder 304
Bitstream 301
Entropy Decoder
Motion data 310
Transform-1 and Quantization-1
314
312
Intra Prediction
316
Inter Prediction
In-loop Filtering
318
BL Output Frame
308
BL Decoder 302
300

FIG. 3

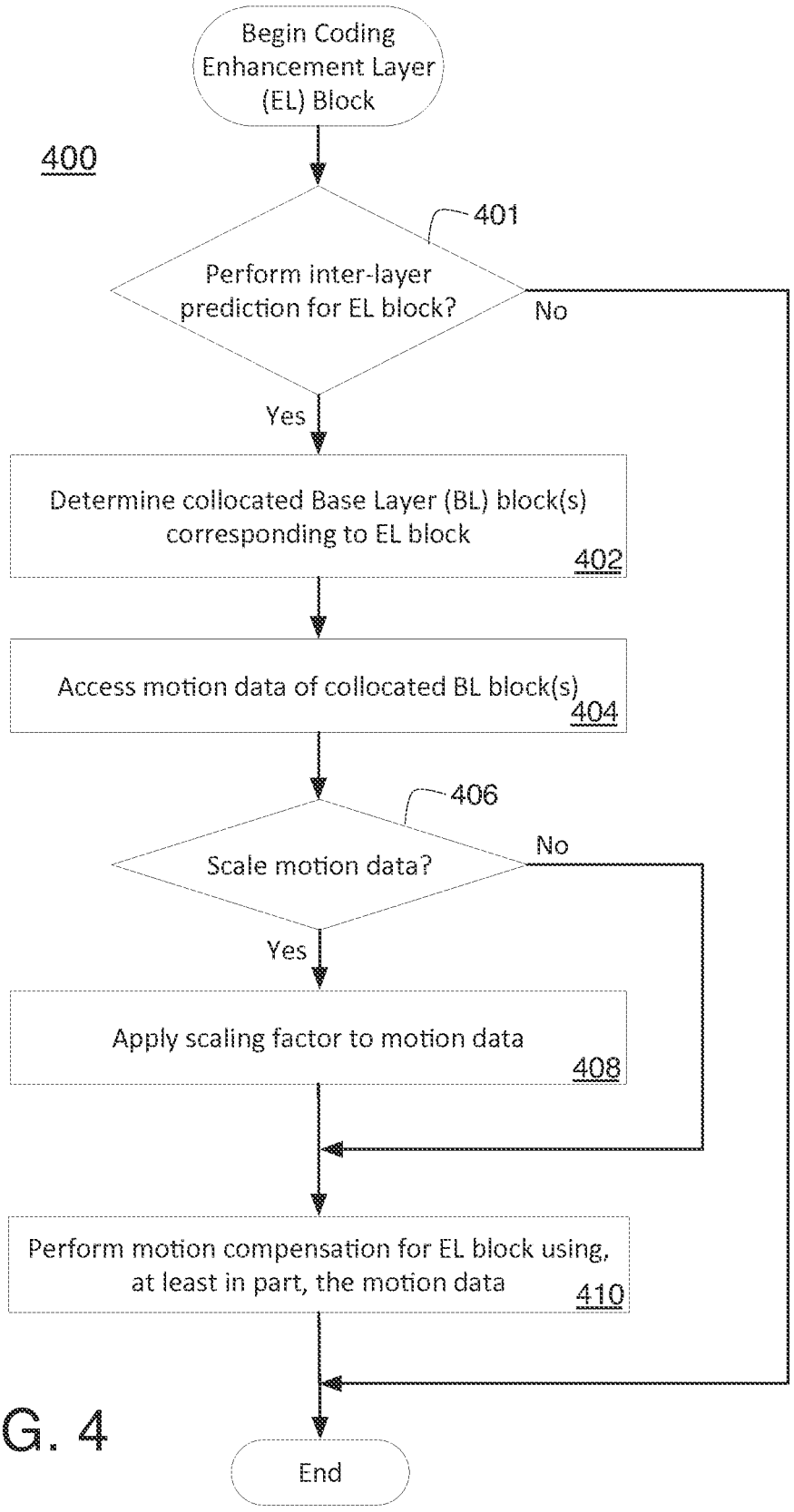
Begin Coding Enhancement Layer (EL) Block
400
401
Perform inter-layer prediction for EL block?
No
Yes
Determine collocated Base Layer (BL) block(s) corresponding to EL block
402
Access motion data of collocated BL block(s)
404
406
Scale motion data?
No
Yes
Apply scaling factor to motion data
408
Perform motion compensation for EL block using, at least in part, the motion data
410
End

FIG. 4

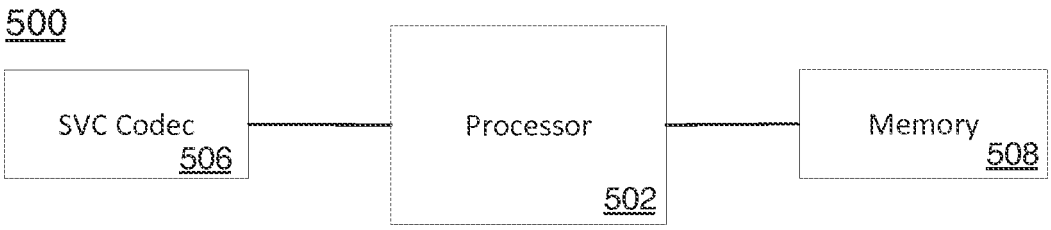

FIG. 5

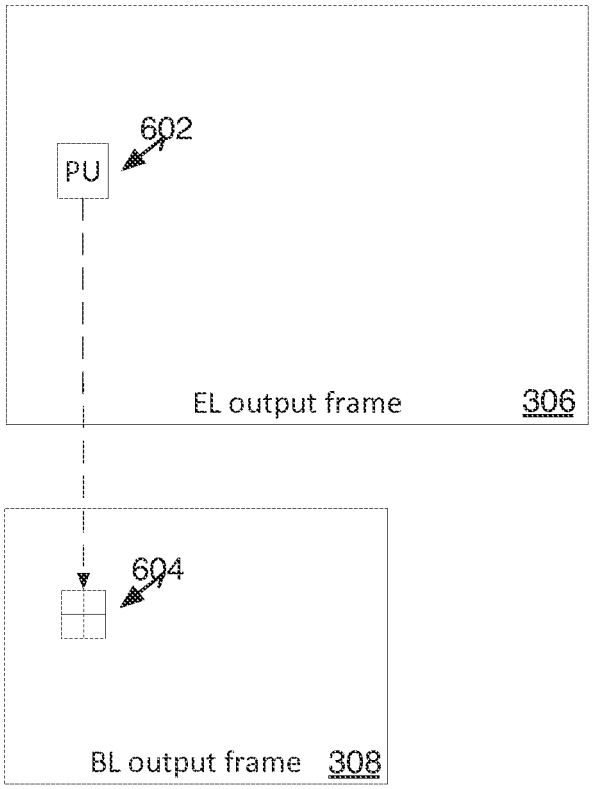

FIG. 6

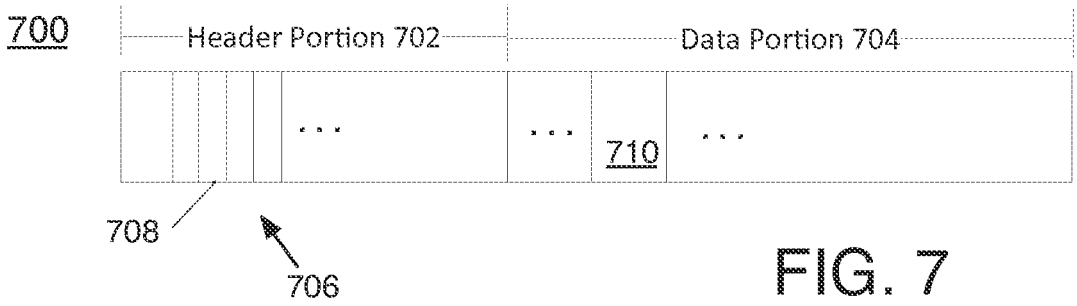

FIG. 7

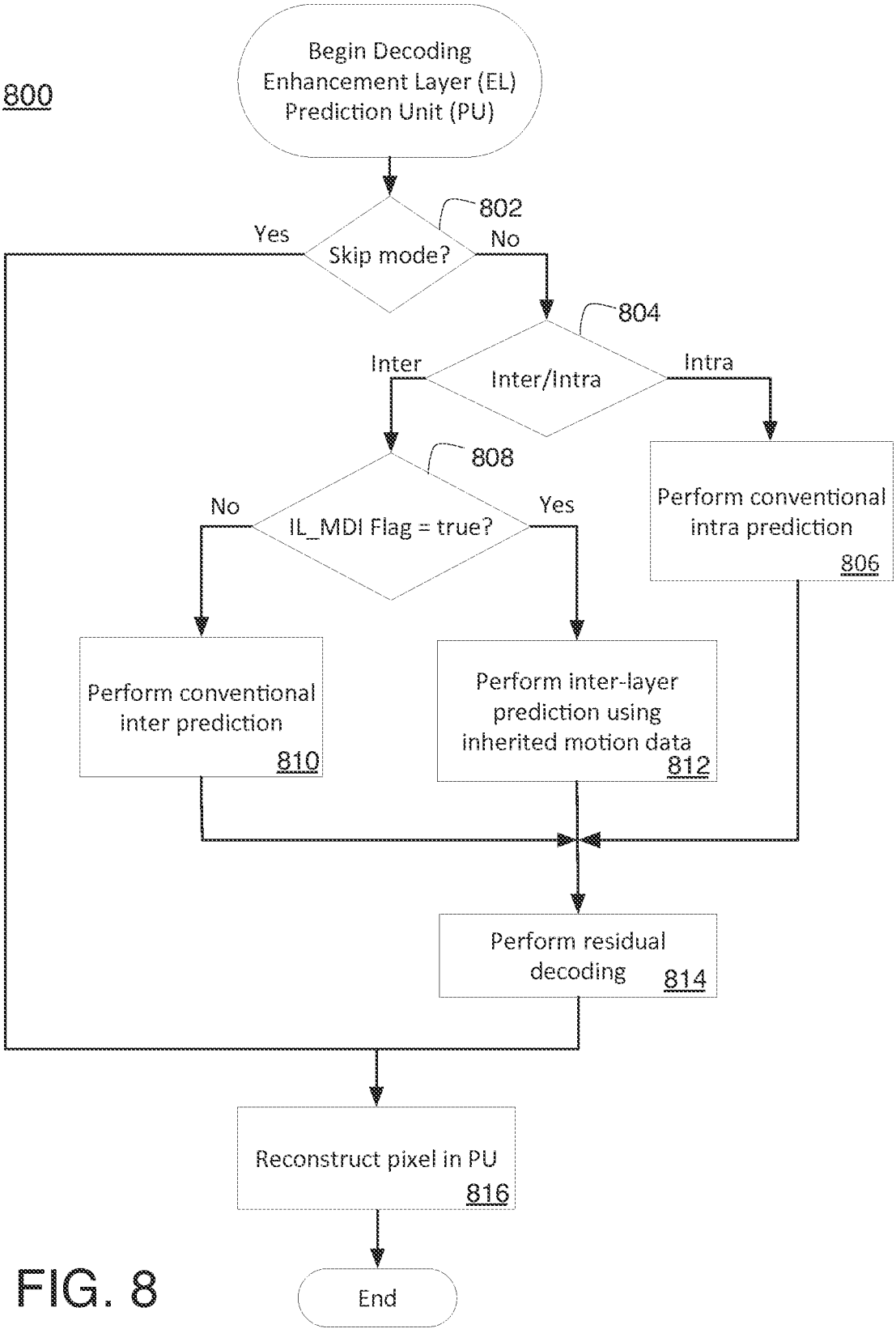
800
Begin Decoding Enhancement Layer (EL) Prediction Unit (PU)
802
Skip mode?
Yes
No
804
Inter/Intra
Inter
Intra
808
IL_MDI Flag = true?
No
Yes
Perform conventional intra prediction 806
Perform conventional inter prediction 810
Perform inter-layer prediction using inherited motion data 812
Perform residual decoding 814
Reconstruct pixel in PU 816
End

FIG. 8

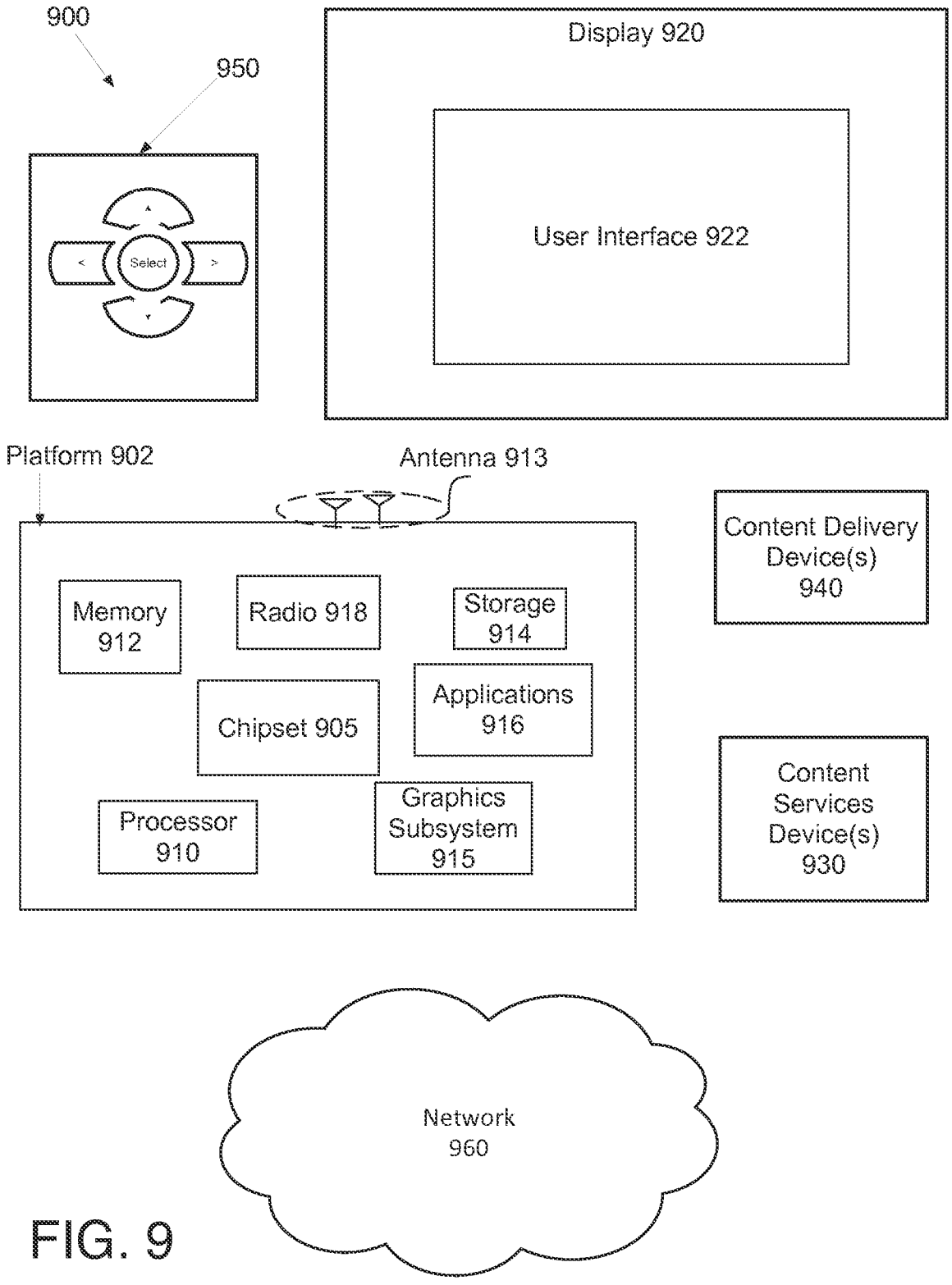
900
950
Select
Display 920
User Interface 922
Platform 902
Antenna 913
Memory 912
Radio 918
Storage 914
Chipset 905
Applications 916
Processor 910
Graphics Subsystem 915
Content Delivery Device(s) 940
Content Services Device(s) 930
Network 960

FIG. 9

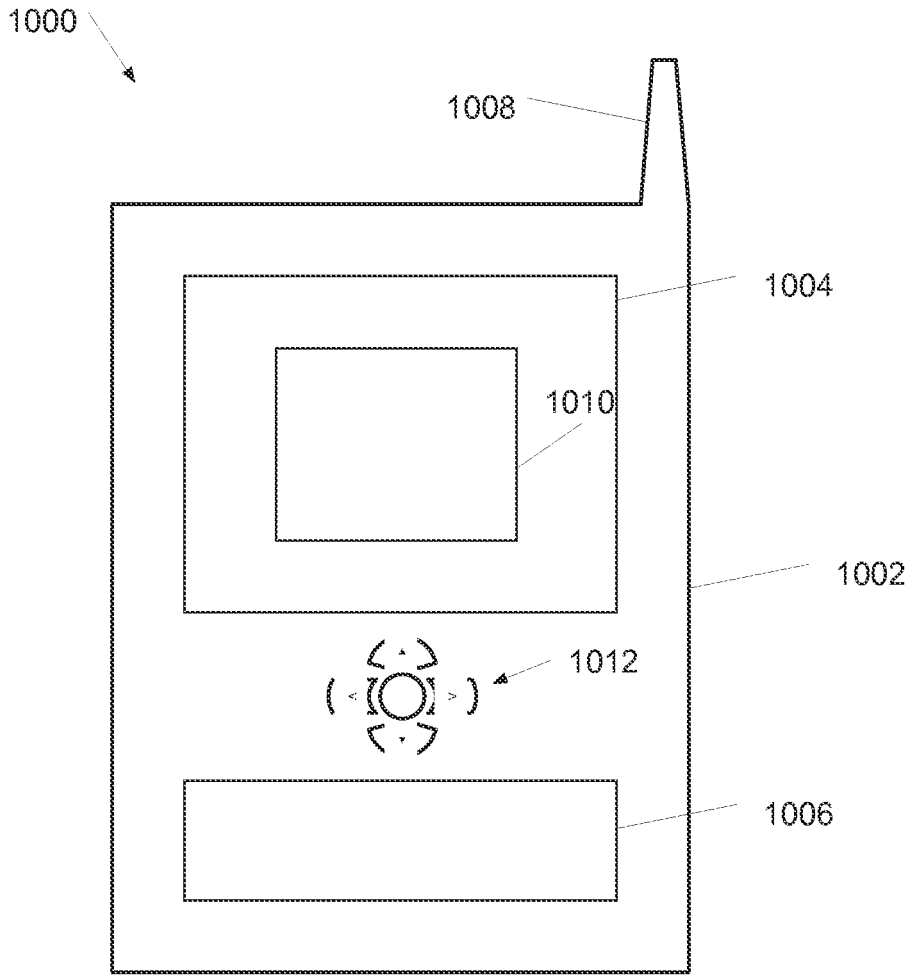

FIG. 10

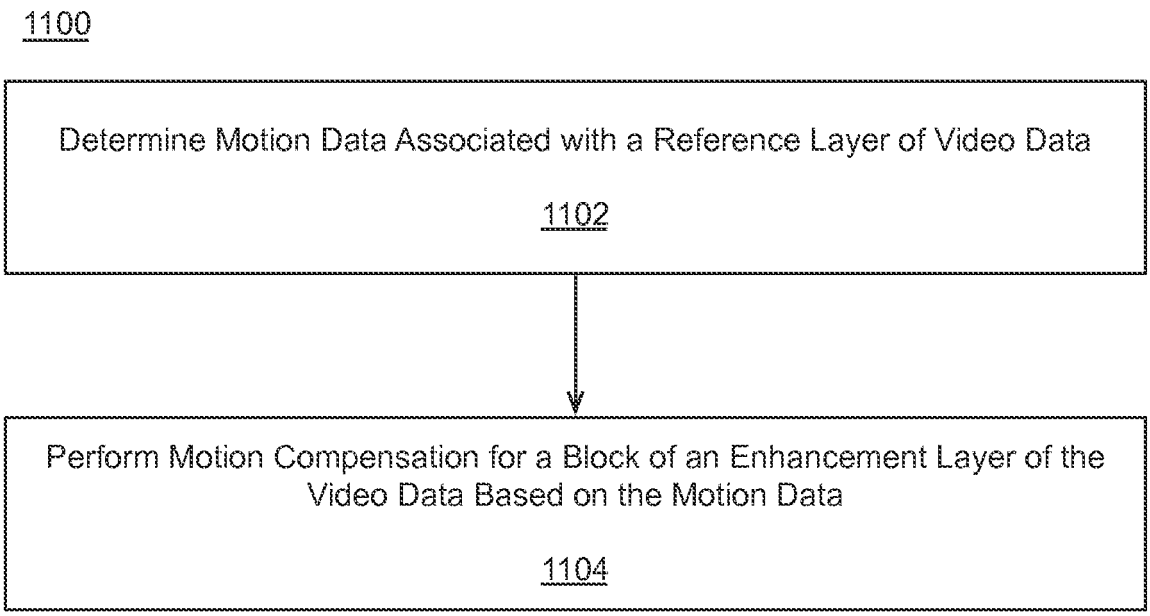
1100
Determine Motion Data Associated with a Reference Layer of Video Data
1102
Perform Motion Compensation for a Block of an Enhancement Layer of the Video Data Based on the Motion Data
1104

FIG. 11

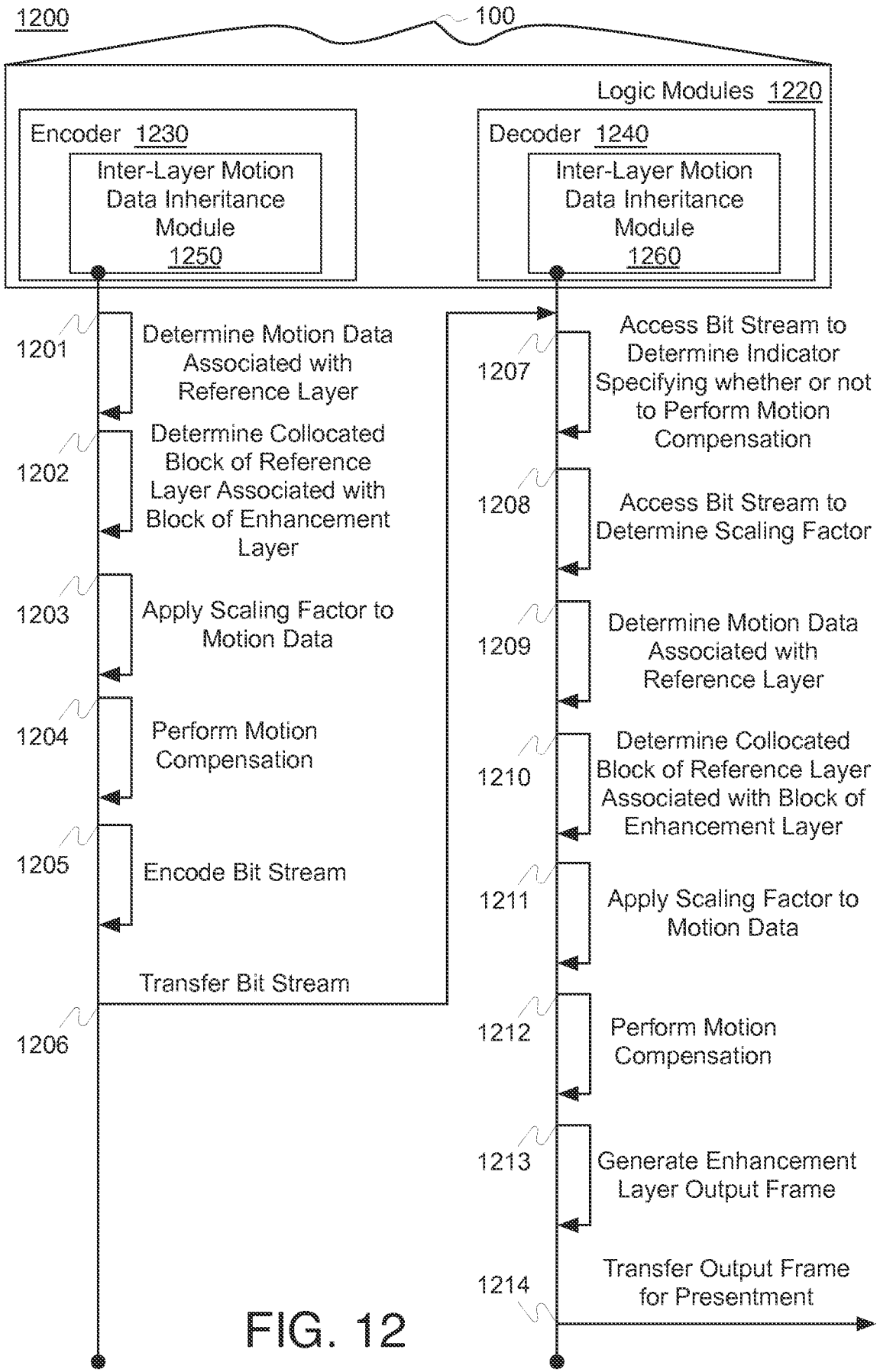
1200
100
Logic Modules 1220
Encoder 1230
Inter-Layer Motion Data Inheritance Module 1250
Decoder 1240
Inter-Layer Motion Data Inheritance Module 1260
1201
Determine Motion Data Associated with Reference Layer
1202
Determine Collocated Block of Reference Layer Associated with Block of Enhancement Layer
1203
Apply Scaling Factor to Motion Data
1204
Perform Motion Compensation
1205
Encode Bit Stream
Transfer Bit Stream
1206
1207
Access Bit Stream to Determine Indicator Specifying whether or not to Perform Motion Compensation
1208
Access Bit Stream to Determine Scaling Factor
1209
Determine Motion Data Associated with Reference Layer
1210
Determine Collocated Block of Reference Layer Associated with Block of Enhancement Layer
1211
Apply Scaling Factor to Motion Data
1212
Perform Motion Compensation
1213
Generate Enhancement Layer Output Frame
1214
Transfer Output Frame for Presentment

FIG. 12

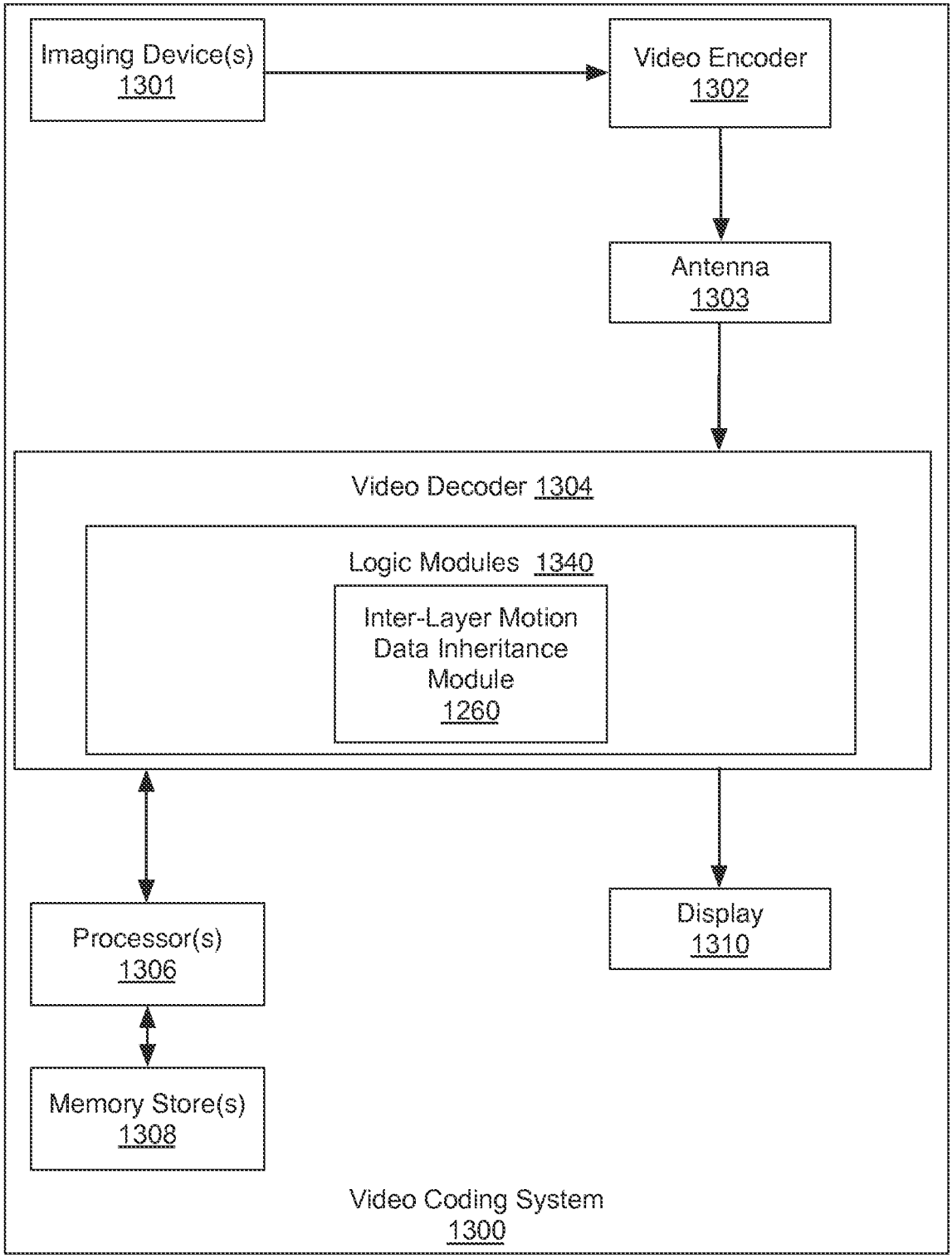
Imaging Device(s)
1301
Video Encoder
1302
Antenna
1303
Video Decoder 1304
Logic Modules 1340
Inter-Layer Motion Data Inheritance Module
1260
Processor(s)
1306
Display
1310
Memory Store(s)
1308
Video Coding System
1300

FIG. 13