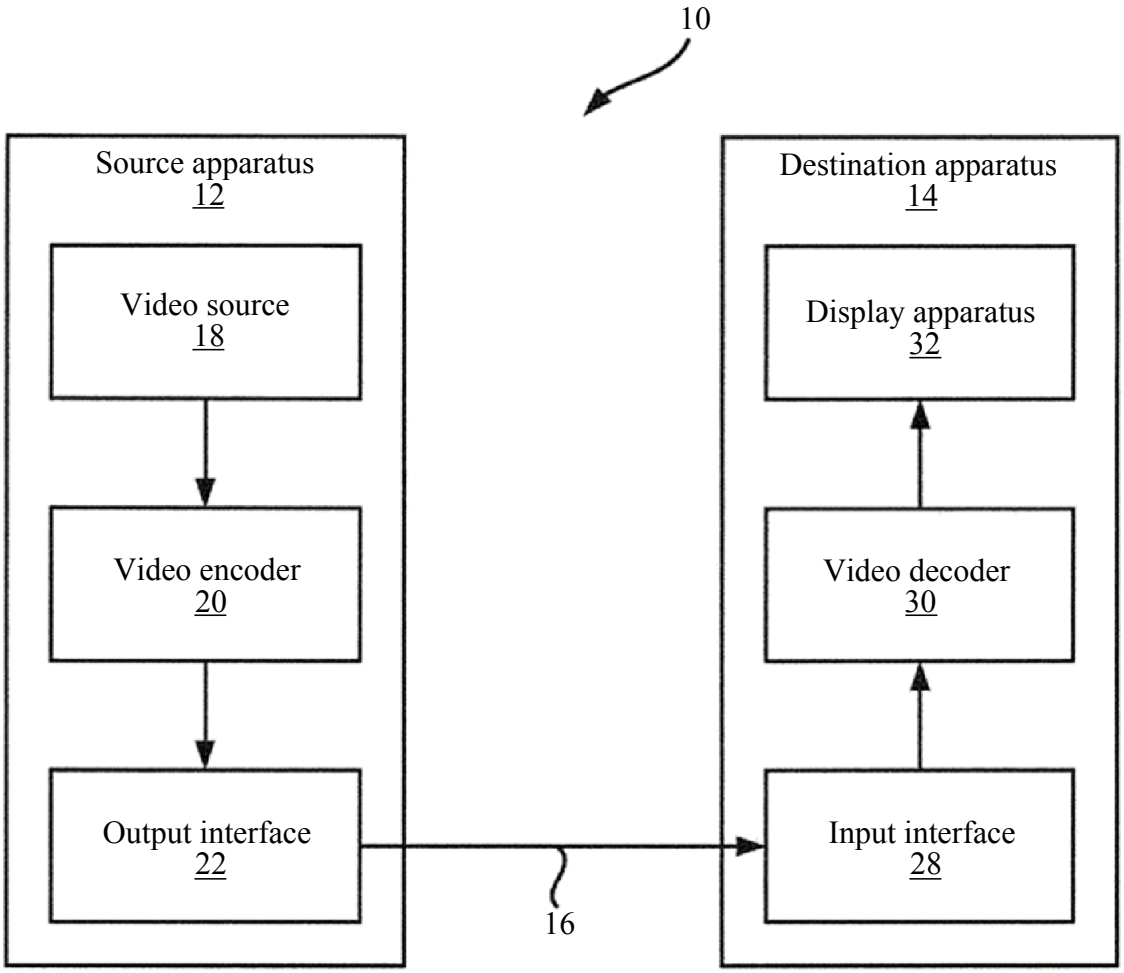
10
Source apparatus
12
Video source
18
Video encoder
20
Output interface
22
16
Destination apparatus
14
Display apparatus
32
Video decoder
30
Input interface
28

FIG. 1

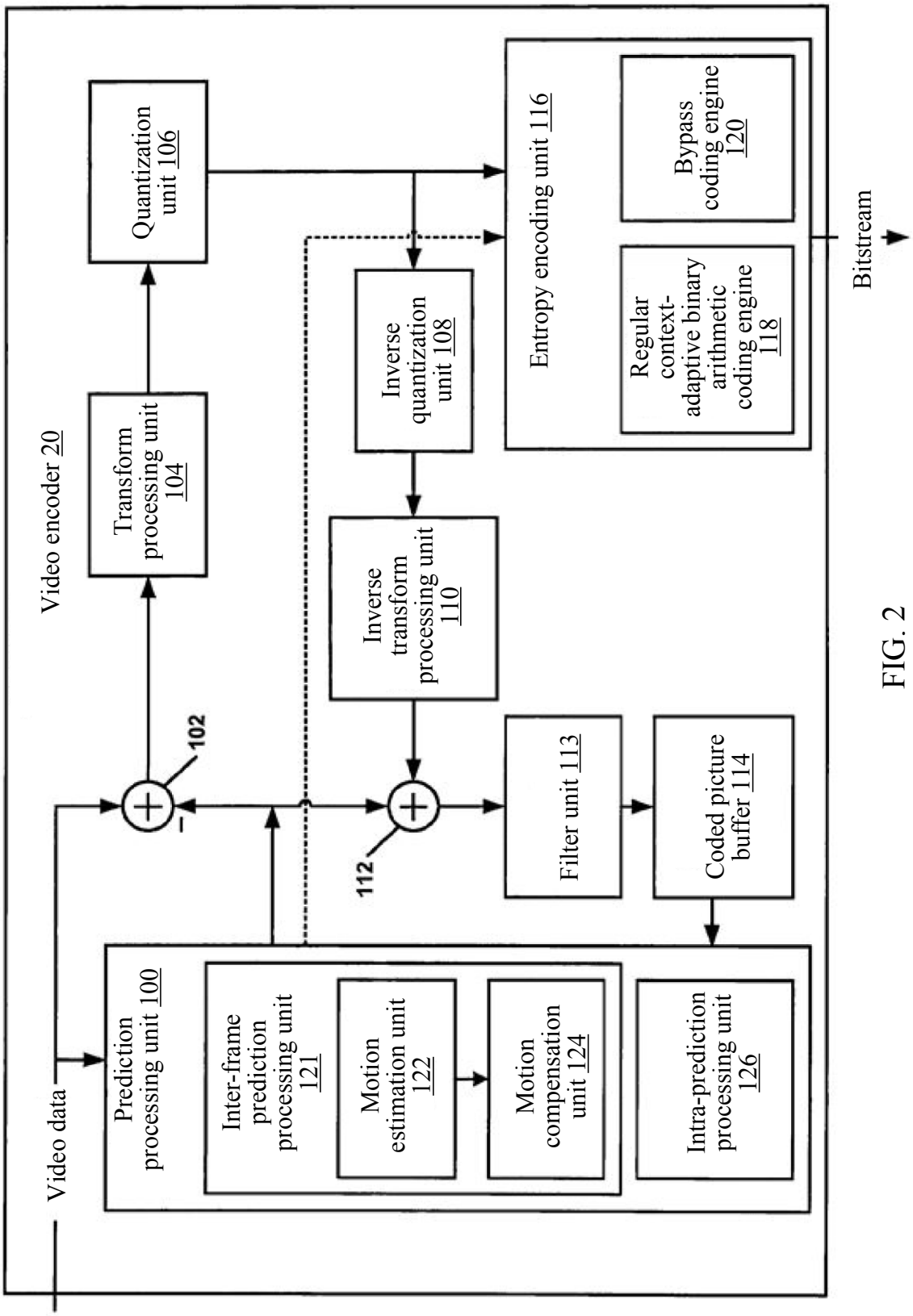
Video encoder 20
Video data
Prediction processing unit 100
Inter-frame prediction processing unit 121
Motion estimation unit 122
Motion compensation unit 124
Intra-prediction processing unit 126
102
Transform processing unit 104
Quantization unit 106
Inverse quantization unit 108
Inverse transform processing unit 110
112
Filter unit 113
Coded picture buffer 114
Entropy encoding unit 116
Regular context-adaptive binary arithmetic coding engine 118
Bypass coding engine 120
Bitstream

FIG. 2

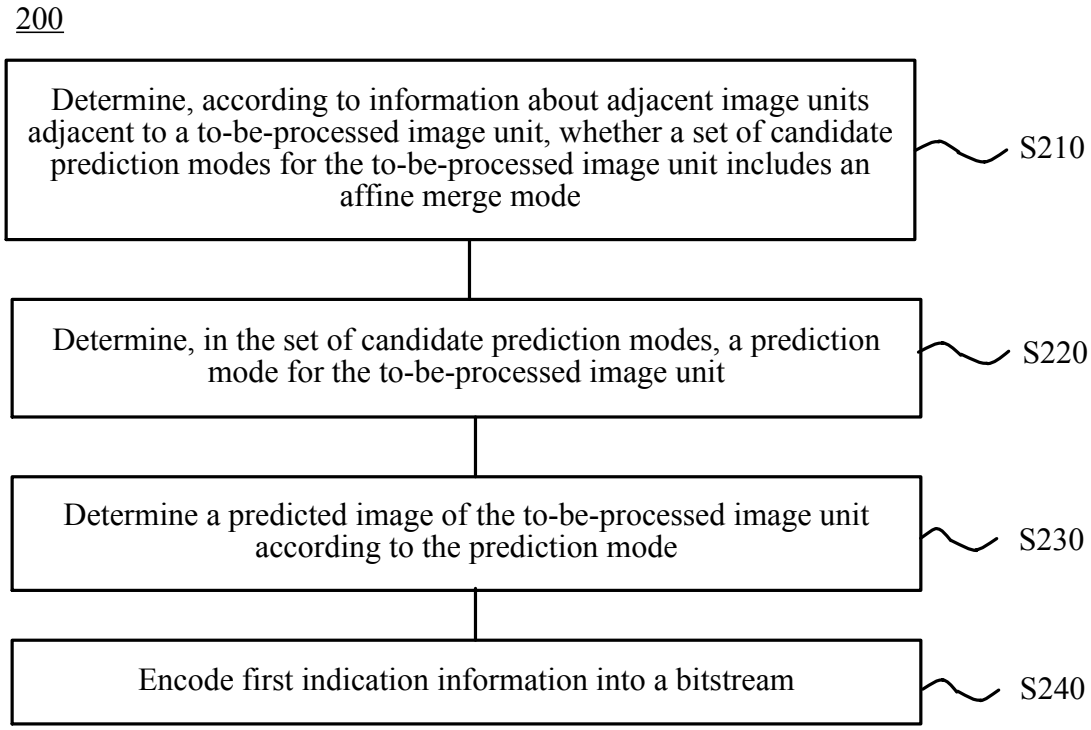


FIG. 3

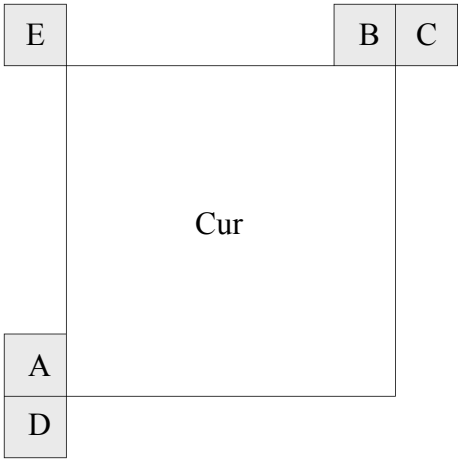


FIG. 4

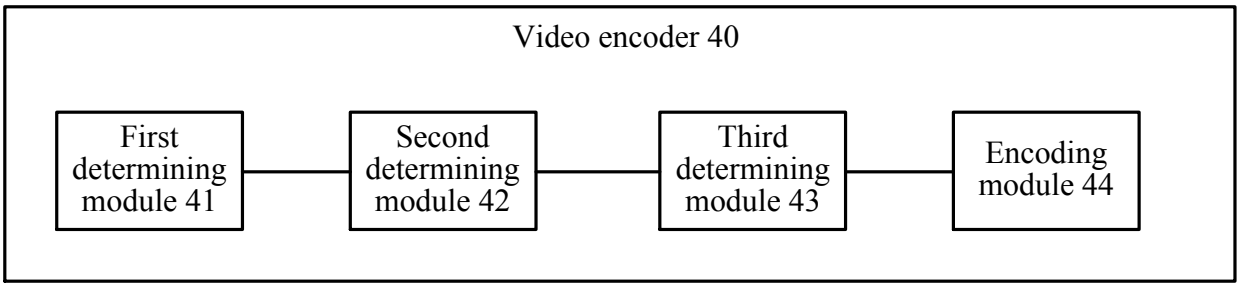


FIG. 5

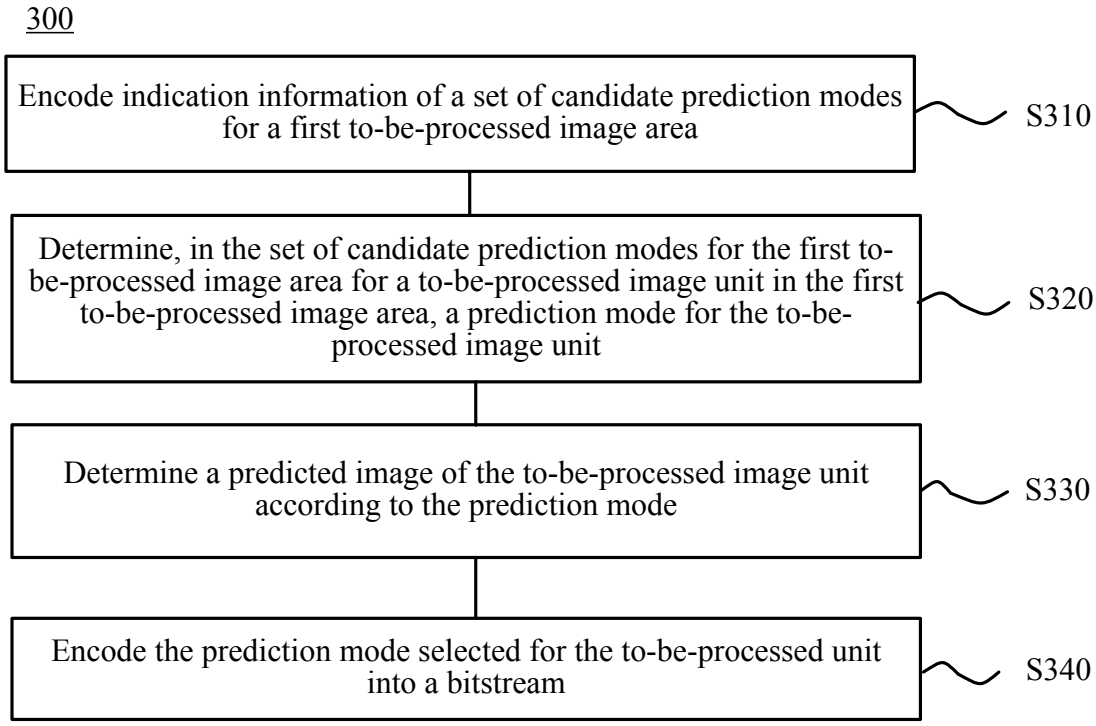
300
Encode indication information of a set of candidate prediction modes for a first to-be-processed image area
S310
Determine, in the set of candidate prediction modes for the first to-be-processed image area for a to-be-processed image unit in the first to-be-processed image area, a prediction mode for the to-be-processed image unit
S320
Determine a predicted image of the to-be-processed image unit according to the prediction mode
S330
Encode the prediction mode selected for the to-be-processed unit into a bitstream
S340

FIG. 6

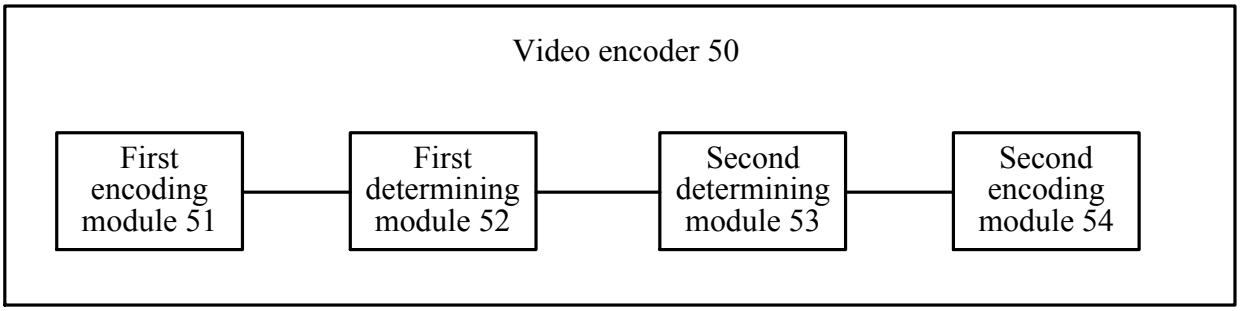
Video encoder 50
First encoding module 51
First determining module 52
Second determining module 53
Second encoding module 54

FIG. 7

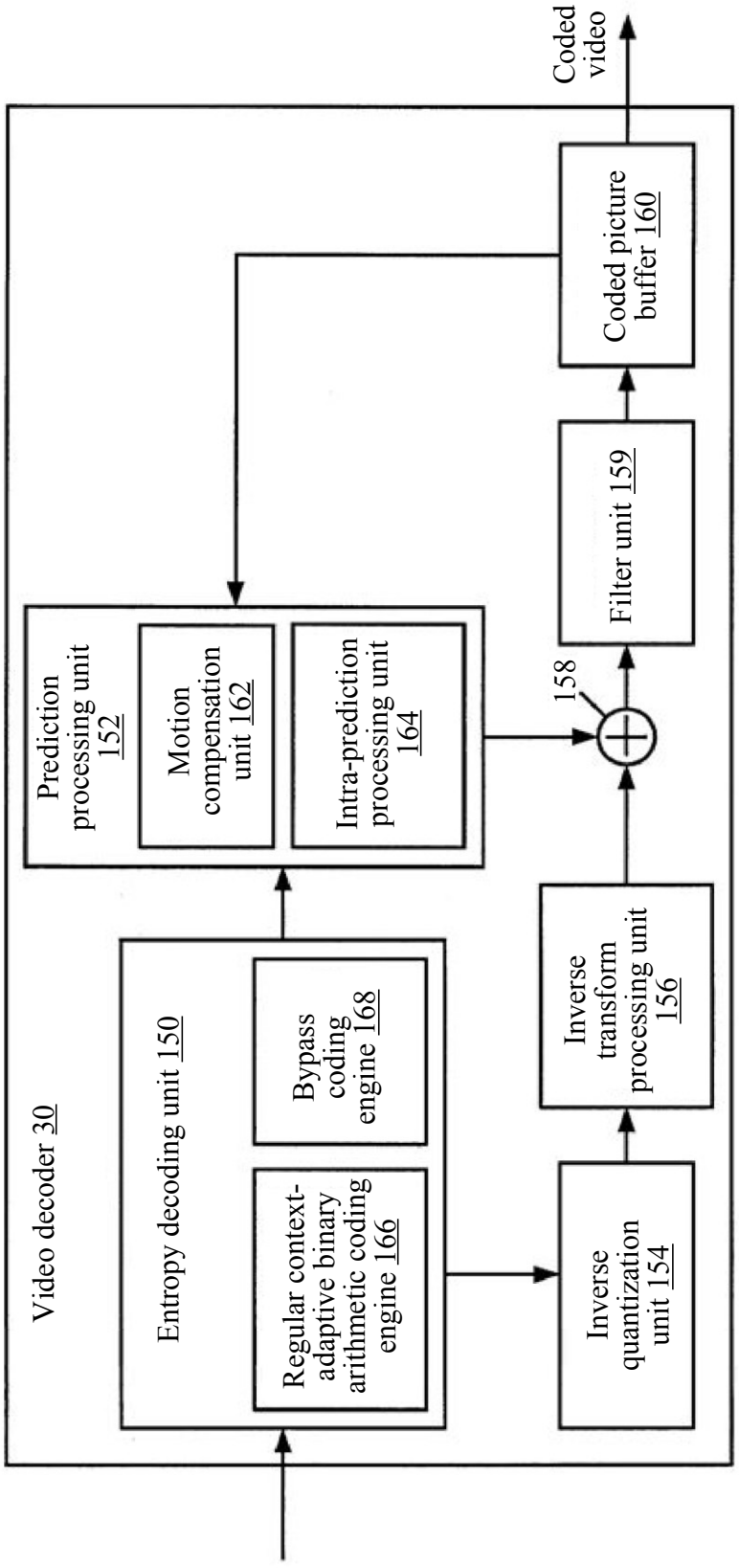
Video decoder 30
Entropy decoding unit 150
Regular context-adaptive binary arithmetic coding engine 166
Bypass coding engine 168
Prediction processing unit 152
Motion compensation unit 162
Intra-prediction processing unit 164
Inverse quantization unit 154
Inverse transform processing unit 156
158
Filter unit 159
Coded picture buffer 160
Coded video

FIG. 8

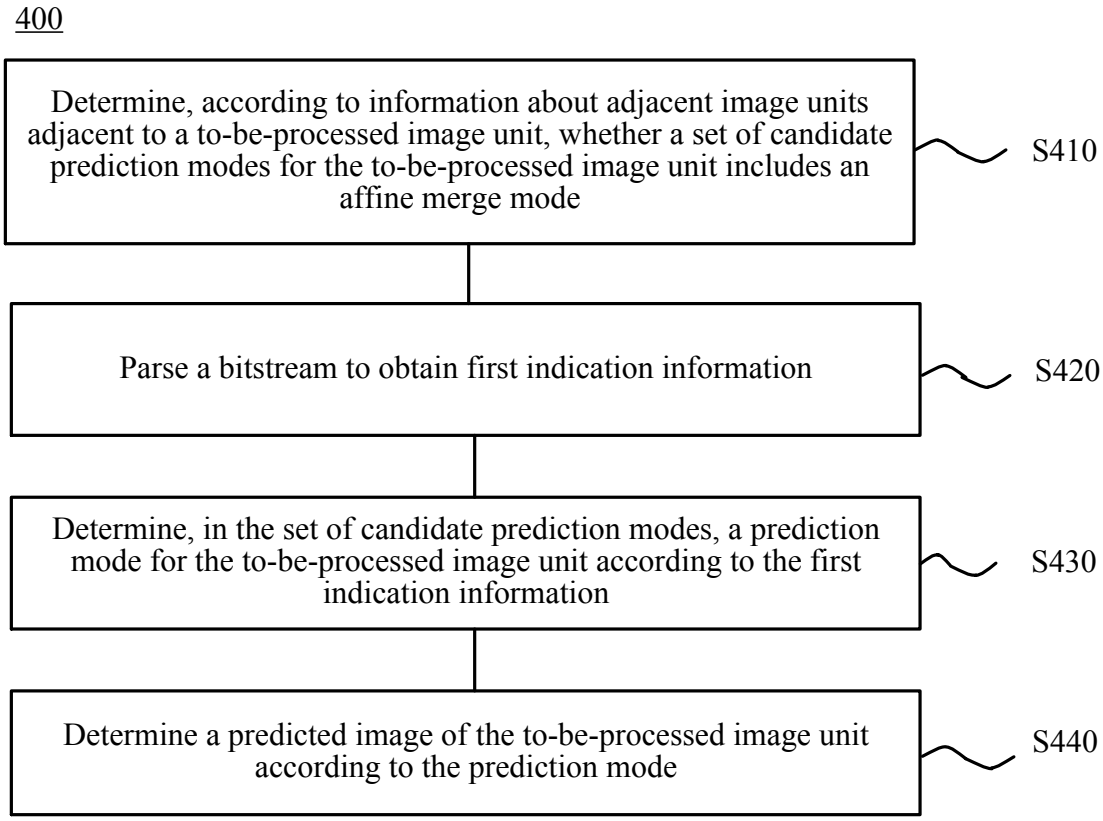
400
Determine, according to information about adjacent image units adjacent to a to-be-processed image unit, whether a set of candidate prediction modes for the to-be-processed image unit includes an affine merge mode
S410
Parse a bitstream to obtain first indication information
S420
Determine, in the set of candidate prediction modes, a prediction mode for the to-be-processed image unit according to the first indication information
S430
Determine a predicted image of the to-be-processed image unit according to the prediction mode
S440

FIG. 9

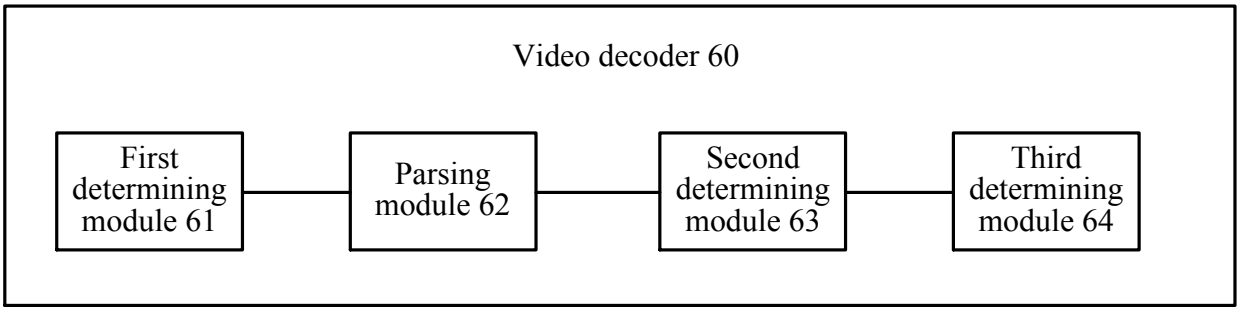
Video decoder 60
First determining module 61
Parsing module 62
Second determining module 63
Third determining module 64

FIG. 10

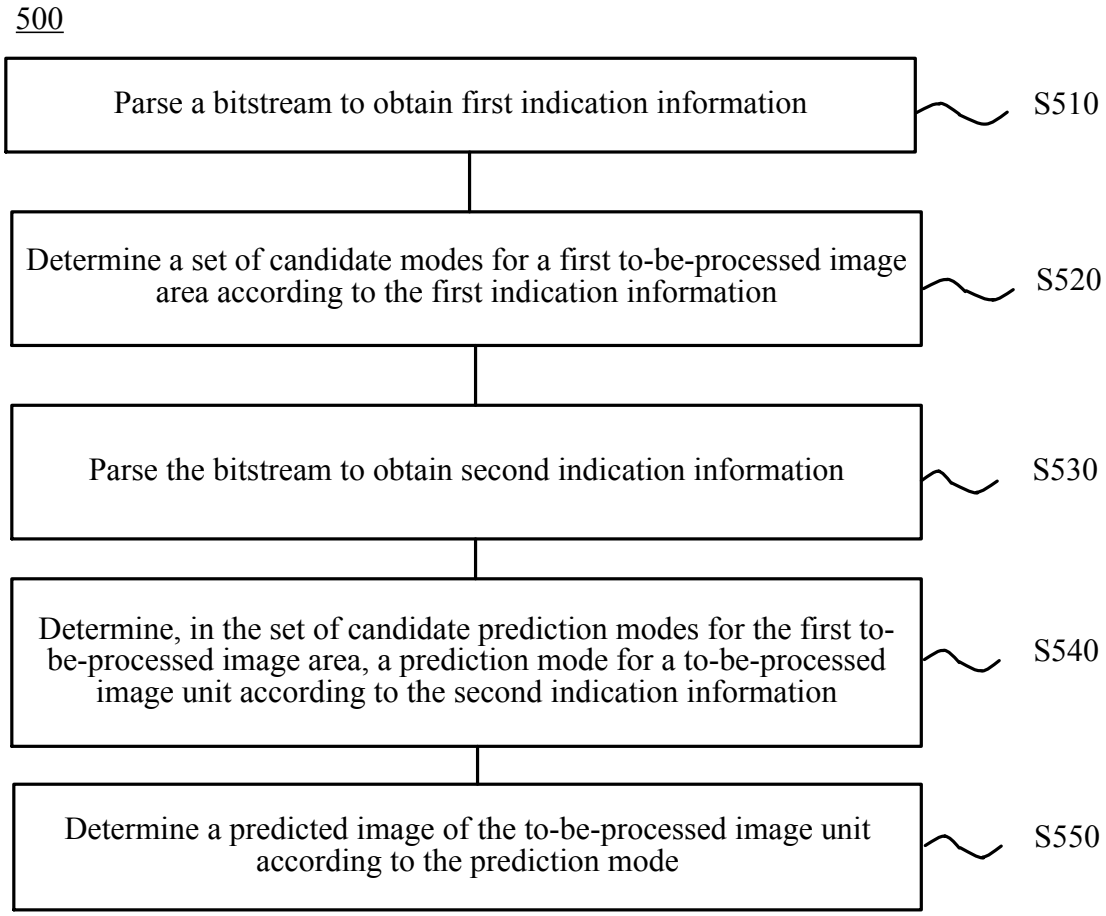
500
Parse a bitstream to obtain first indication information
S510
Determine a set of candidate modes for a first to-be-processed image area according to the first indication information
S520
Parse the bitstream to obtain second indication information
S530
Determine, in the set of candidate prediction modes for the first to-be-processed image area, a prediction mode for a to-be-processed image unit according to the second indication information
S540
Determine a predicted image of the to-be-processed image unit according to the prediction mode
S550

FIG. 11

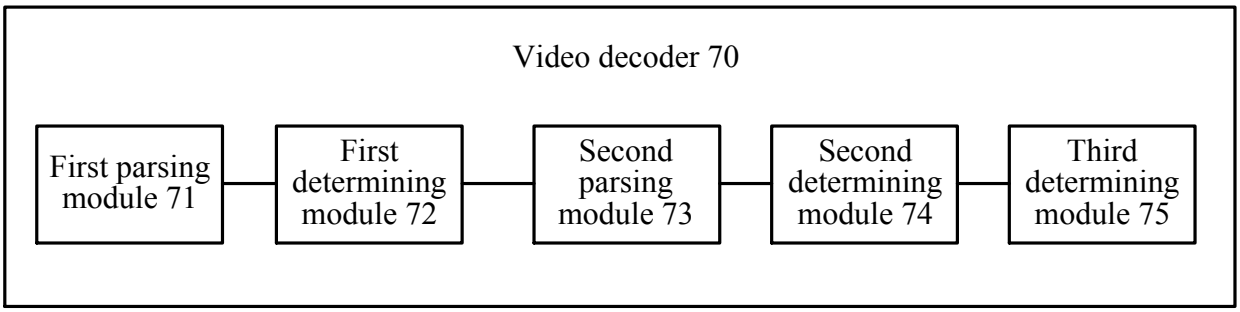
Video decoder 70
First parsing module 71
First determining module 72
Second parsing module 73
Second determining module 74
Third determining module 75

FIG. 12