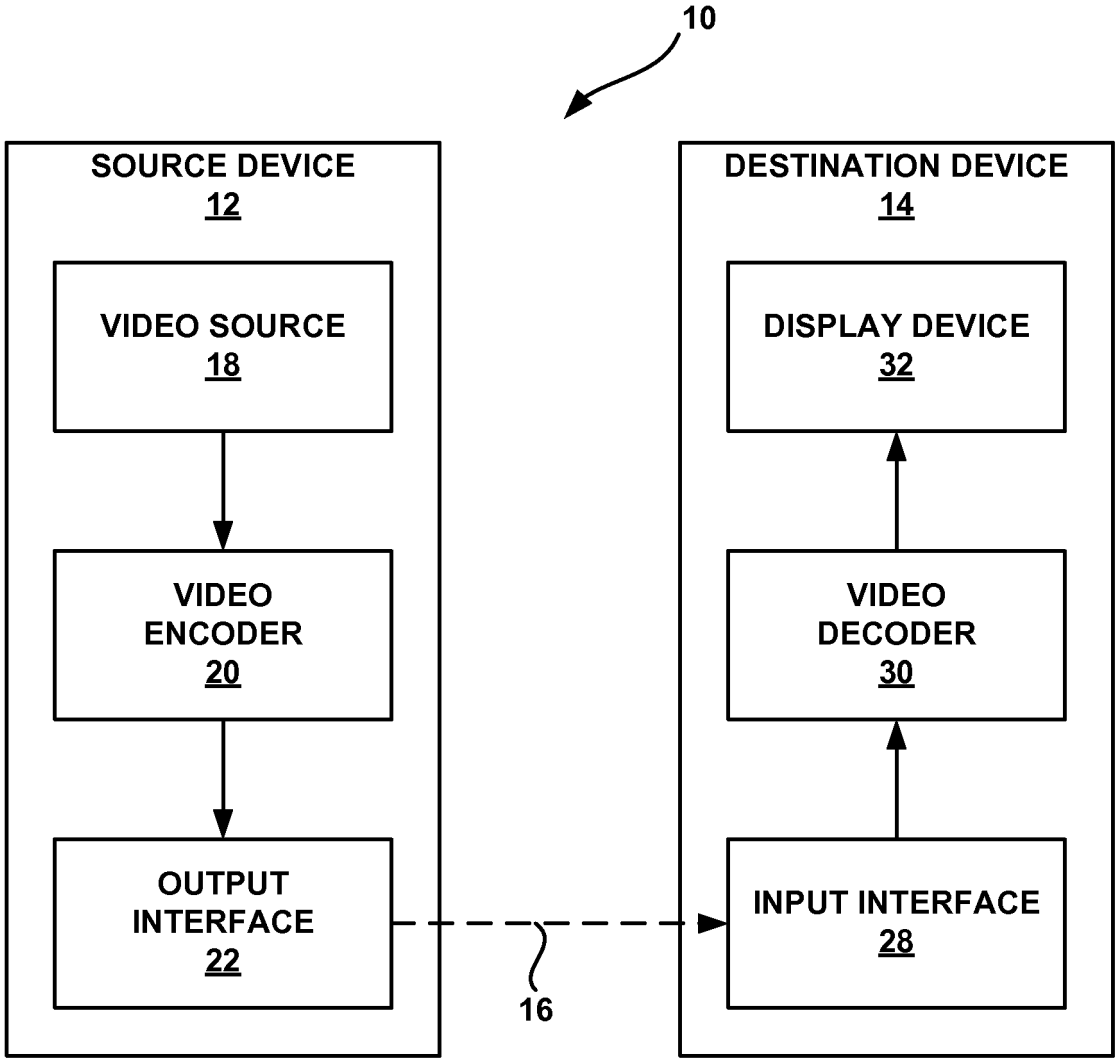

10
SOURCE DEVICE
12
VIDEO SOURCE
18
VIDEO
ENCODER
20
OUTPUT
INTERFACE
22
16
DESTINATION DEVICE
14
DISPLAY DEVICE
32
VIDEO
DECODER
30
INPUT INTERFACE
28

FIG. 1

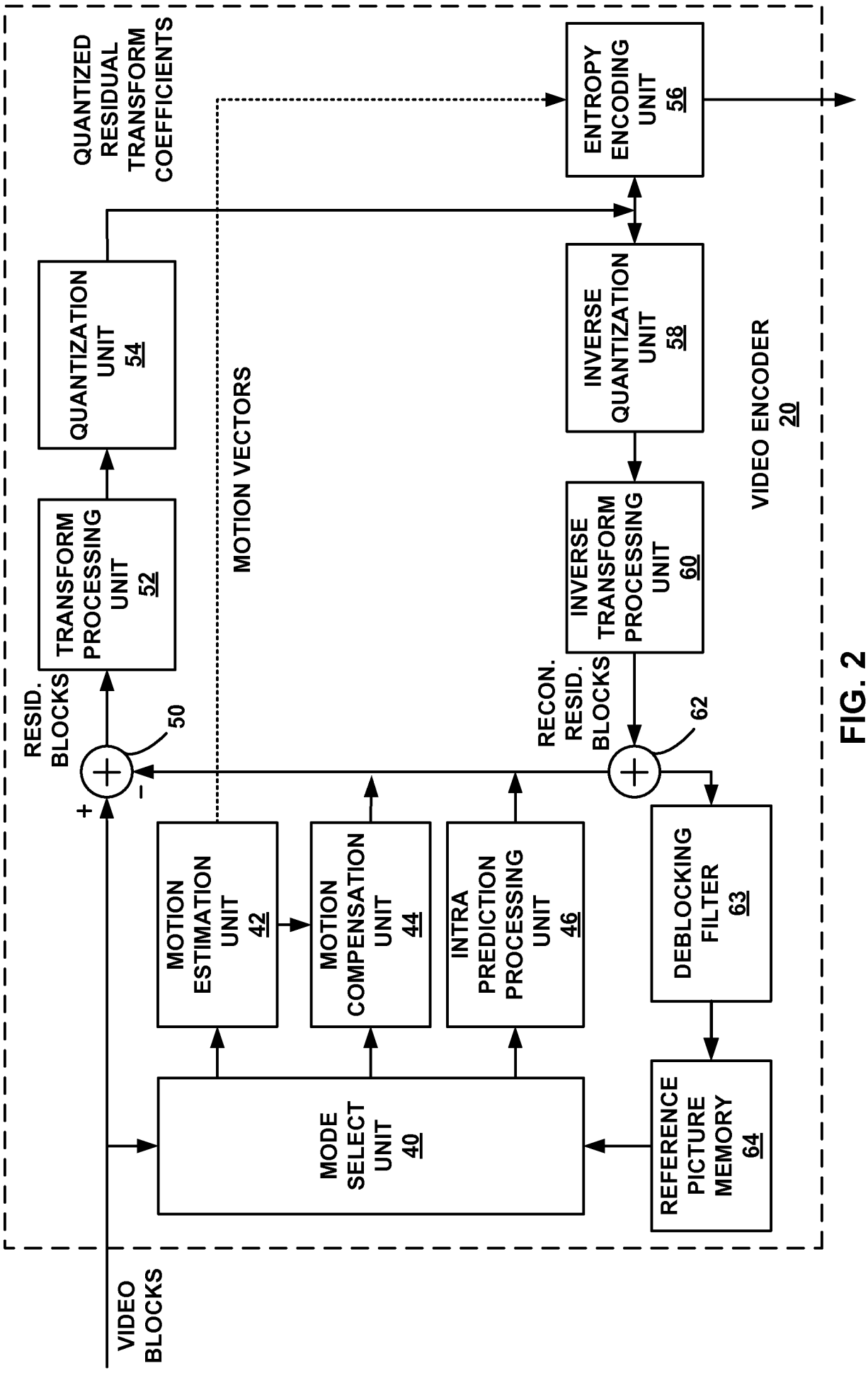

VIDEO ENCODER
20
VIDEO BLOCKS
QUANTIZED RESIDUAL TRANSFORM COEFFICIENTS
MOTION VECTORS
RESID. BLOCKS
RECON. RESID. BLOCKS
50
62
+
-
TRANSFORM PROCESSING UNIT
52
QUANTIZATION UNIT
54
ENTROPY ENCODING UNIT
56
INVERSE QUANTIZATION UNIT
58
INVERSE TRANSFORM PROCESSING UNIT
60
MOTION ESTIMATION UNIT
42
MOTION COMPENSATION UNIT
44
INTRA PREDICTION PROCESSING UNIT
46
DEBLOCKING FILTER
63
MODE SELECT UNIT
40
REFERENCE PICTURE MEMORY
64

FIG. 2

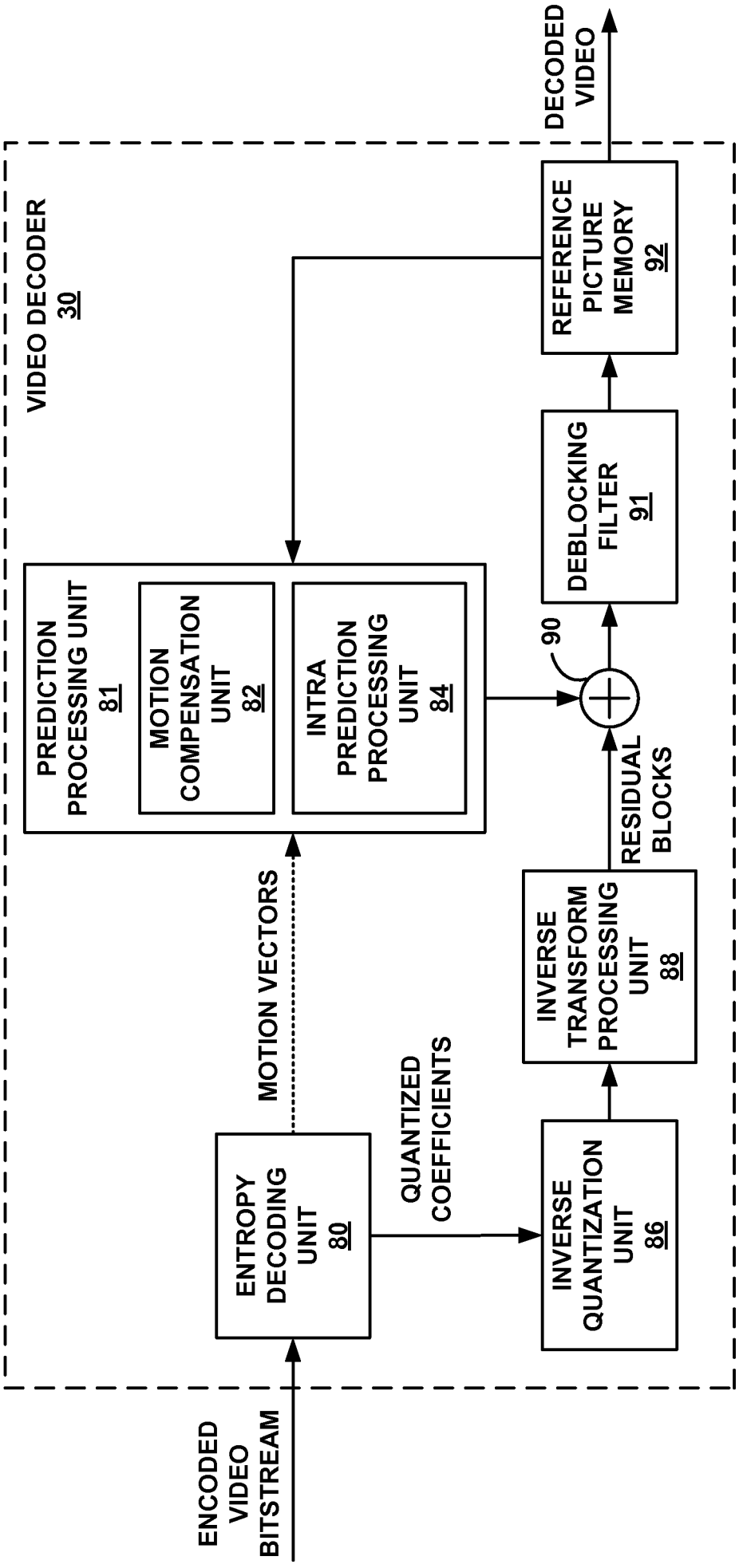

DECODED VIDEO
VIDEO DECODER 30
REFERENCE PICTURE MEMORY 92
DEBLOCKING FILTER 91
PREDICTION PROCESSING UNIT 81
MOTION COMPENSATION UNIT 82
INTRA PREDICTION PROCESSING UNIT 84
90
RESIDUAL BLOCKS
INVERSE TRANSFORM PROCESSING UNIT 88
MOTION VECTORS
QUANTIZED COEFFICIENTS
ENTROPY DECODING UNIT 80
INVERSE QUANTIZATION UNIT 86
ENCODED VIDEO BITSTREAM

FIG. 3

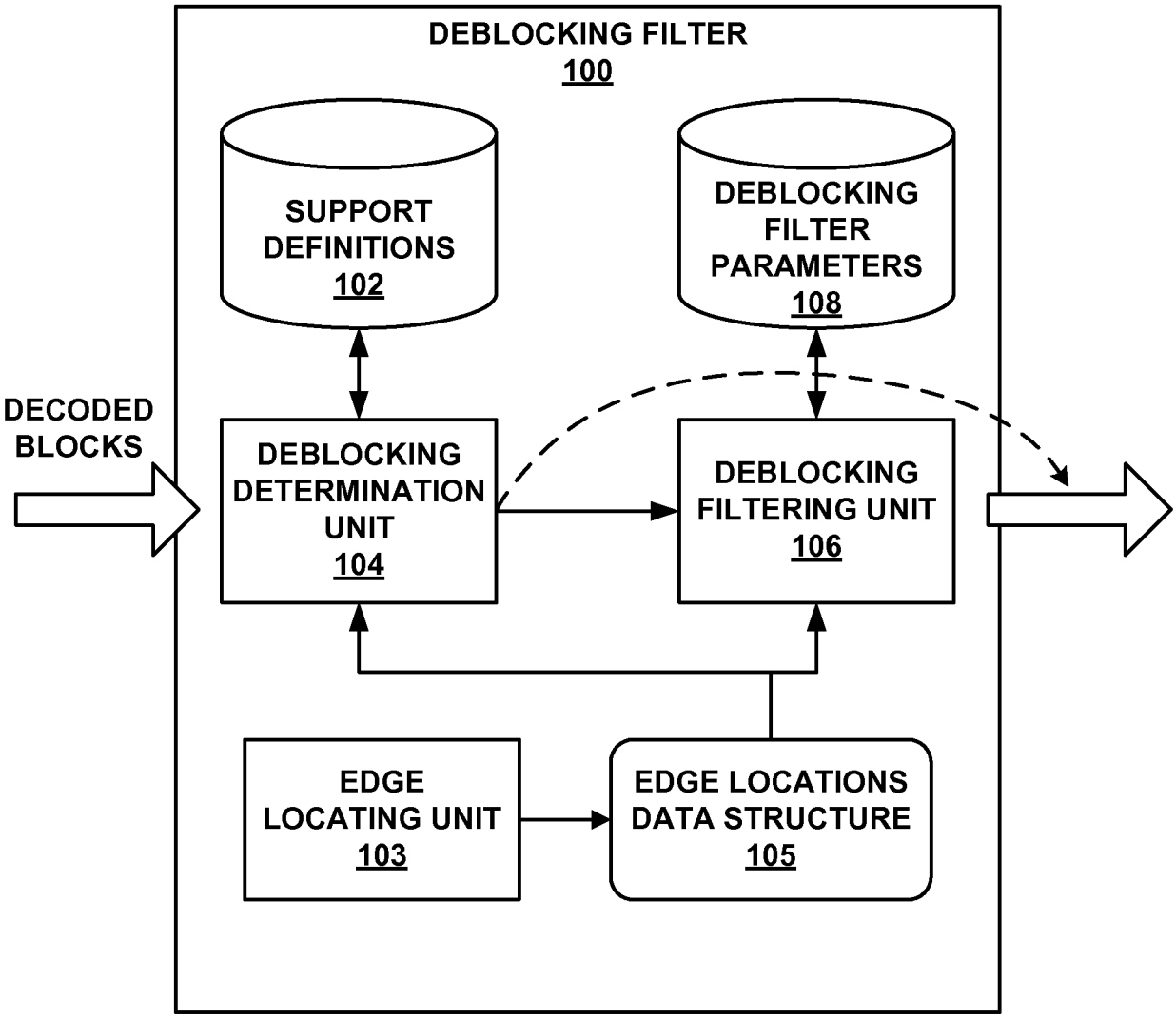

DEBLOCKING FILTER
100
SUPPORT DEFINITIONS
102
DEBLOCKING FILTER PARAMETERS
108
DECODED BLOCKS
DEBLOCKING DETERMINATION UNIT
104
DEBLOCKING FILTERING UNIT
106
EDGE LOCATING UNIT
103
EDGE LOCATIONS DATA STRUCTURE
105

FIG. 4

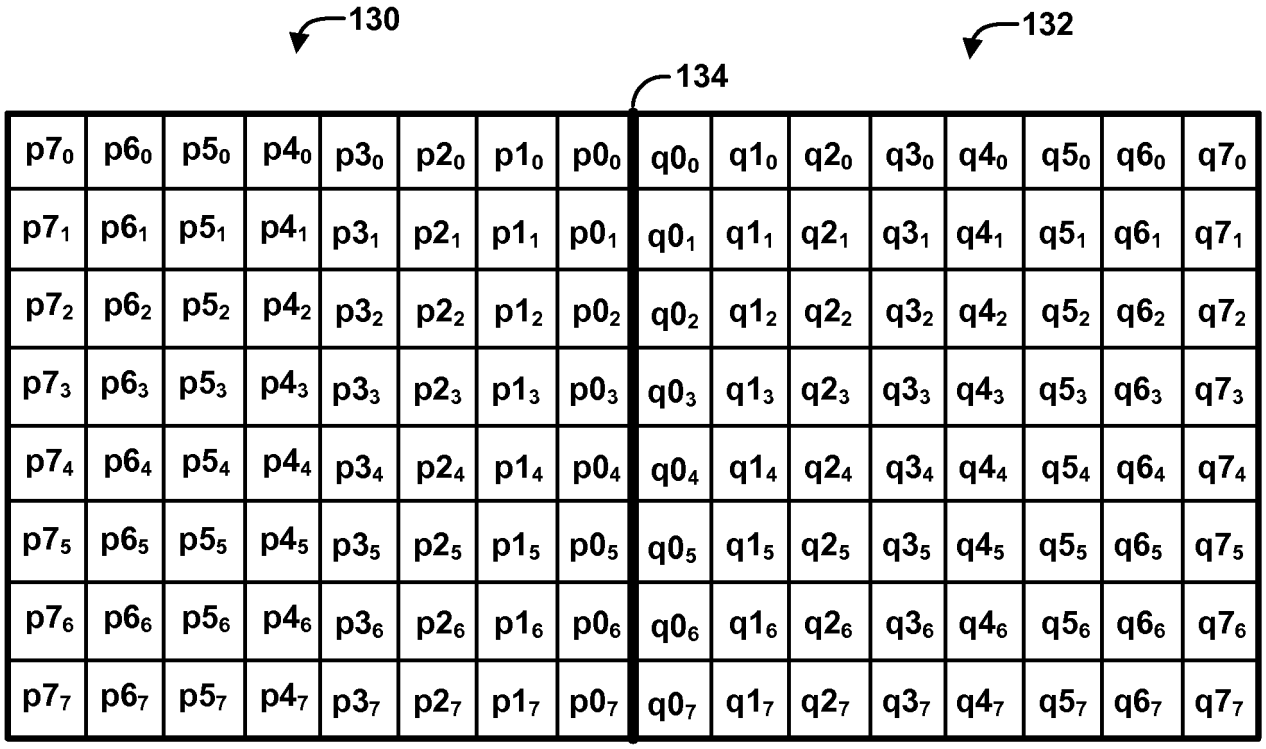

130
132
134
p7$_0$ p6$_0$ p5$_0$ p4$_0$ p3$_0$ p2$_0$ p1$_0$ p0$_0$ q0$_0$ q1$_0$ q2$_0$ q3$_0$ q4$_0$ q5$_0$ q6$_0$ q7$_0$
p7$_1$ p6$_1$ p5$_1$ p4$_1$ p3$_1$ p2$_1$ p1$_1$ p0$_1$ q0$_1$ q1$_1$ q2$_1$ q3$_1$ q4$_1$ q5$_1$ q6$_1$ q7$_1$
p7$_2$ p6$_2$ p5$_2$ p4$_2$ p3$_2$ p2$_2$ p1$_2$ p0$_2$ q0$_2$ q1$_2$ q2$_2$ q3$_2$ q4$_2$ q5$_2$ q6$_2$ q7$_2$
p7$_3$ p6$_3$ p5$_3$ p4$_3$ p3$_3$ p2$_3$ p1$_3$ p0$_3$ q0$_3$ q1$_3$ q2$_3$ q3$_3$ q4$_3$ q5$_3$ q6$_3$ q7$_3$
p7$_4$ p6$_4$ p5$_4$ p4$_4$ p3$_4$ p2$_4$ p1$_4$ p0$_4$ q0$_4$ q1$_4$ q2$_4$ q3$_4$ q4$_4$ q5$_4$ q6$_4$ q7$_4$
p7$_5$ p6$_5$ p5$_5$ p4$_5$ p3$_5$ p2$_5$ p1$_5$ p0$_5$ q0$_5$ q1$_5$ q2$_5$ q3$_5$ q4$_5$ q5$_5$ q6$_5$ q7$_5$
p7$_6$ p6$_6$ p5$_6$ p4$_6$ p3$_6$ p2$_6$ p1$_6$ p0$_6$ q0$_6$ q1$_6$ q2$_6$ q3$_6$ q4$_6$ q5$_6$ q6$_6$ q7$_6$
p7$_7$ p6$_7$ p5$_7$ p4$_7$ p3$_7$ p2$_7$ p1$_7$ p0$_7$ q0$_7$ q1$_7$ q2$_7$ q3$_7$ q4$_7$ q5$_7$ q6$_7$ q7$_7$

FIG. 5

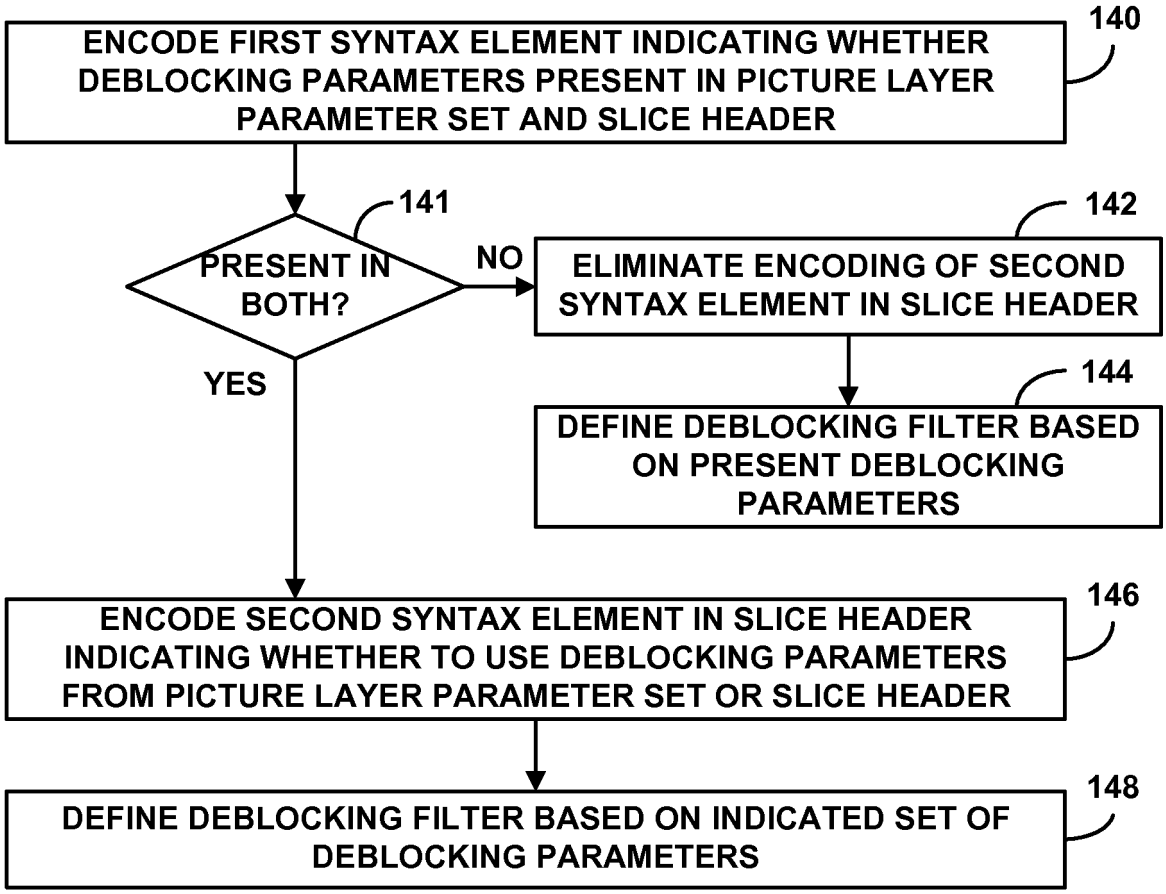

ENCODE FIRST SYNTAX ELEMENT INDICATING WHETHER DEBLOCKING PARAMETERS PRESENT IN PICTURE LAYER PARAMETER SET AND SLICE HEADER
140
141
PRESENT IN BOTH?
NO
142
ELIMINATE ENCODING OF SECOND SYNTAX ELEMENT IN SLICE HEADER
YES
144
DEFINE DEBLOCKING FILTER BASED ON PRESENT DEBLOCKING PARAMETERS
ENCODE SECOND SYNTAX ELEMENT IN SLICE HEADER INDICATING WHETHER TO USE DEBLOCKING PARAMETERS FROM PICTURE LAYER PARAMETER SET OR SLICE HEADER
146
DEFINE DEBLOCKING FILTER BASED ON INDICATED SET OF DEBLOCKING PARAMETERS
148

FIG. 6

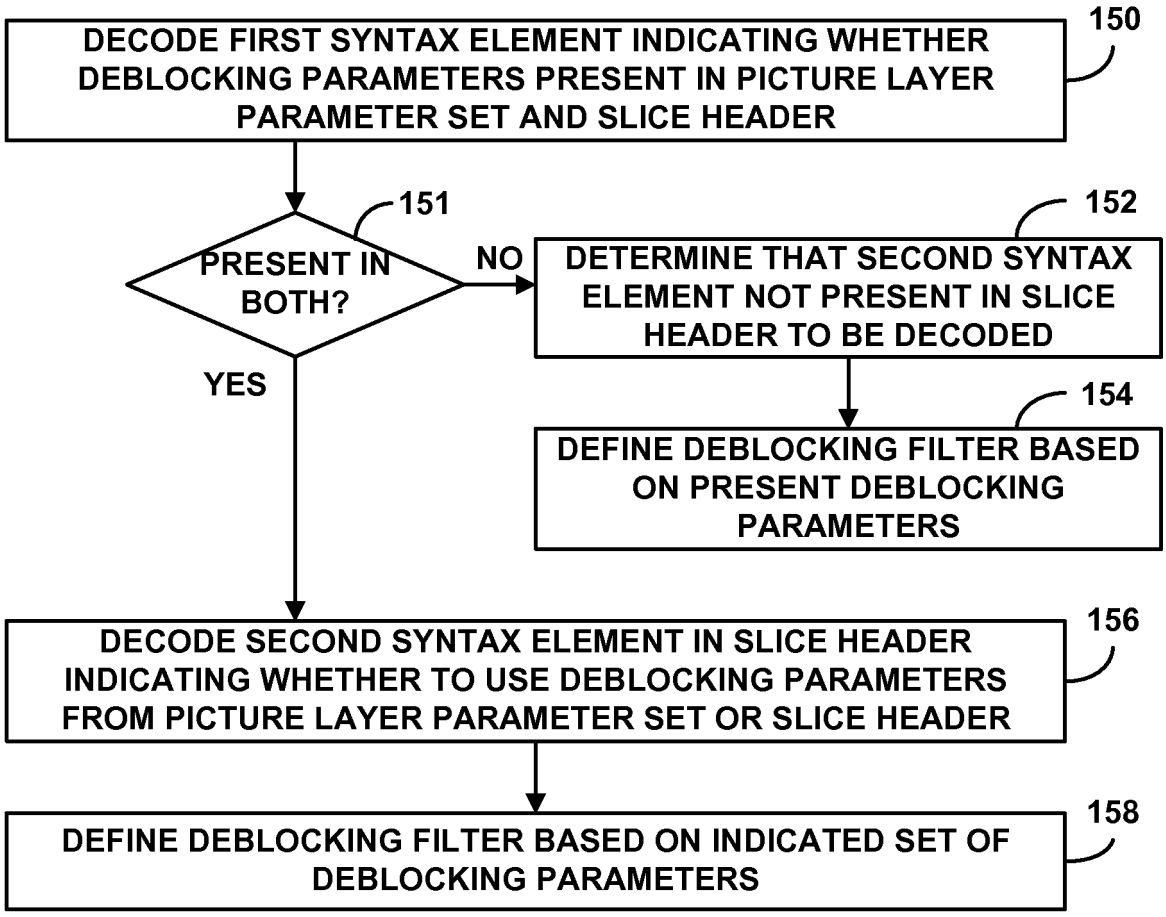

DECODE FIRST SYNTAX ELEMENT INDICATING WHETHER DEBLOCKING PARAMETERS PRESENT IN PICTURE LAYER PARAMETER SET AND SLICE HEADER
150
PRESENT IN BOTH?
151
NO
DETERMINE THAT SECOND SYNTAX ELEMENT NOT PRESENT IN SLICE HEADER TO BE DECODED
152
YES
DEFINE DEBLOCKING FILTER BASED ON PRESENT DEBLOCKING PARAMETERS
154
DECODE SECOND SYNTAX ELEMENT IN SLICE HEADER INDICATING WHETHER TO USE DEBLOCKING PARAMETERS FROM PICTURE LAYER PARAMETER SET OR SLICE HEADER
156
DEFINE DEBLOCKING FILTER BASED ON INDICATED SET OF DEBLOCKING PARAMETERS
158

FIG. 7

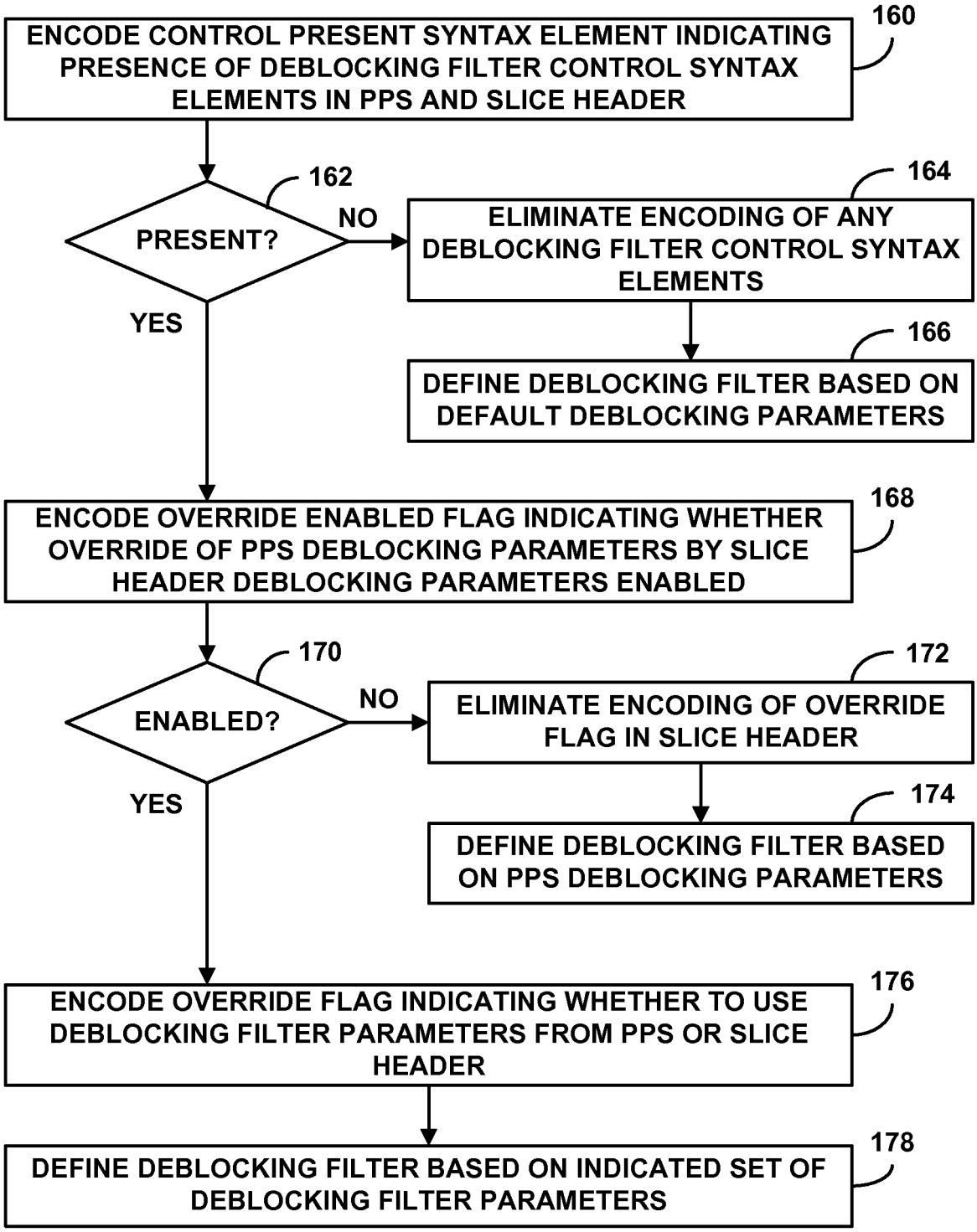

ENCODE CONTROL PRESENT SYNTAX ELEMENT INDICATING PRESENCE OF DEBLOCKING FILTER CONTROL SYNTAX ELEMENTS IN PPS AND SLICE HEADER
160
PRESENT?
162
NO
YES
ELIMINATE ENCODING OF ANY DEBLOCKING FILTER CONTROL SYNTAX ELEMENTS
164
DEFINE DEBLOCKING FILTER BASED ON DEFAULT DEBLOCKING PARAMETERS
166
ENCODE OVERRIDE ENABLED FLAG INDICATING WHETHER OVERRIDE OF PPS DEBLOCKING PARAMETERS BY SLICE HEADER DEBLOCKING PARAMETERS ENABLED
168
ENABLED?
170
NO
YES
ELIMINATE ENCODING OF OVERRIDE FLAG IN SLICE HEADER
172
DEFINE DEBLOCKING FILTER BASED ON PPS DEBLOCKING PARAMETERS
174
ENCODE OVERRIDE FLAG INDICATING WHETHER TO USE DEBLOCKING FILTER PARAMETERS FROM PPS OR SLICE HEADER
176
DEFINE DEBLOCKING FILTER BASED ON INDICATED SET OF DEBLOCKING FILTER PARAMETERS
178

FIG. 8

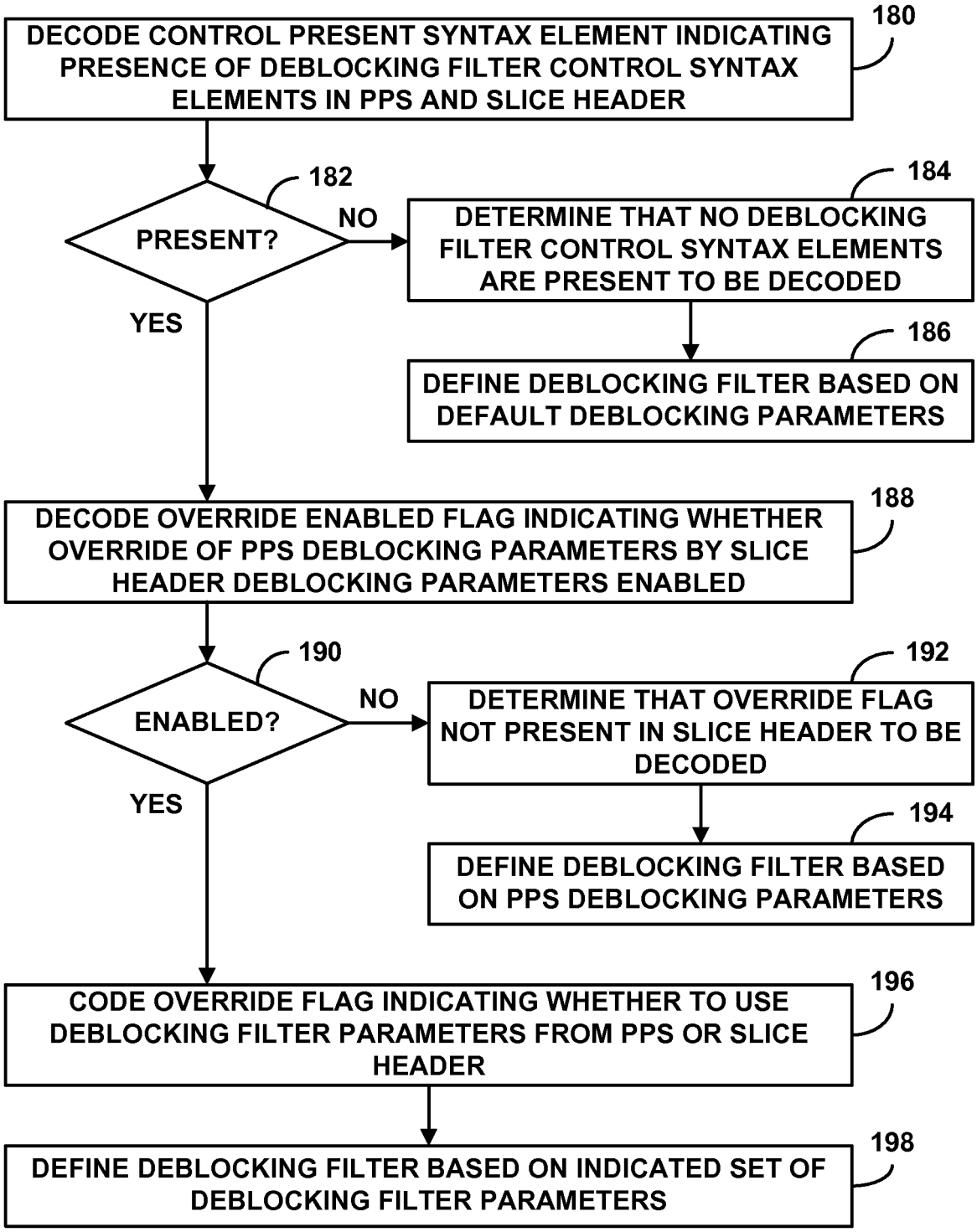

DECODE CONTROL PRESENT SYNTAX ELEMENT INDICATING PRESENCE OF DEBLOCKING FILTER CONTROL SYNTAX ELEMENTS IN PPS AND SLICE HEADER
180
PRESENT?
182
NO
YES
DETERMINE THAT NO DEBLOCKING FILTER CONTROL SYNTAX ELEMENTS ARE PRESENT TO BE DECODED
184
DEFINE DEBLOCKING FILTER BASED ON DEFAULT DEBLOCKING PARAMETERS
186
DECODE OVERRIDE ENABLED FLAG INDICATING WHETHER OVERRIDE OF PPS DEBLOCKING PARAMETERS BY SLICE HEADER DEBLOCKING PARAMETERS ENABLED
188
ENABLED?
190
NO
YES
DETERMINE THAT OVERRIDE FLAG NOT PRESENT IN SLICE HEADER TO BE DECODED
192
DEFINE DEBLOCKING FILTER BASED ON PPS DEBLOCKING PARAMETERS
194
CODE OVERRIDE FLAG INDICATING WHETHER TO USE DEBLOCKING FILTER PARAMETERS FROM PPS OR SLICE HEADER
196
DEFINE DEBLOCKING FILTER BASED ON INDICATED SET OF DEBLOCKING FILTER PARAMETERS
198

FIG. 9