FIG. 1

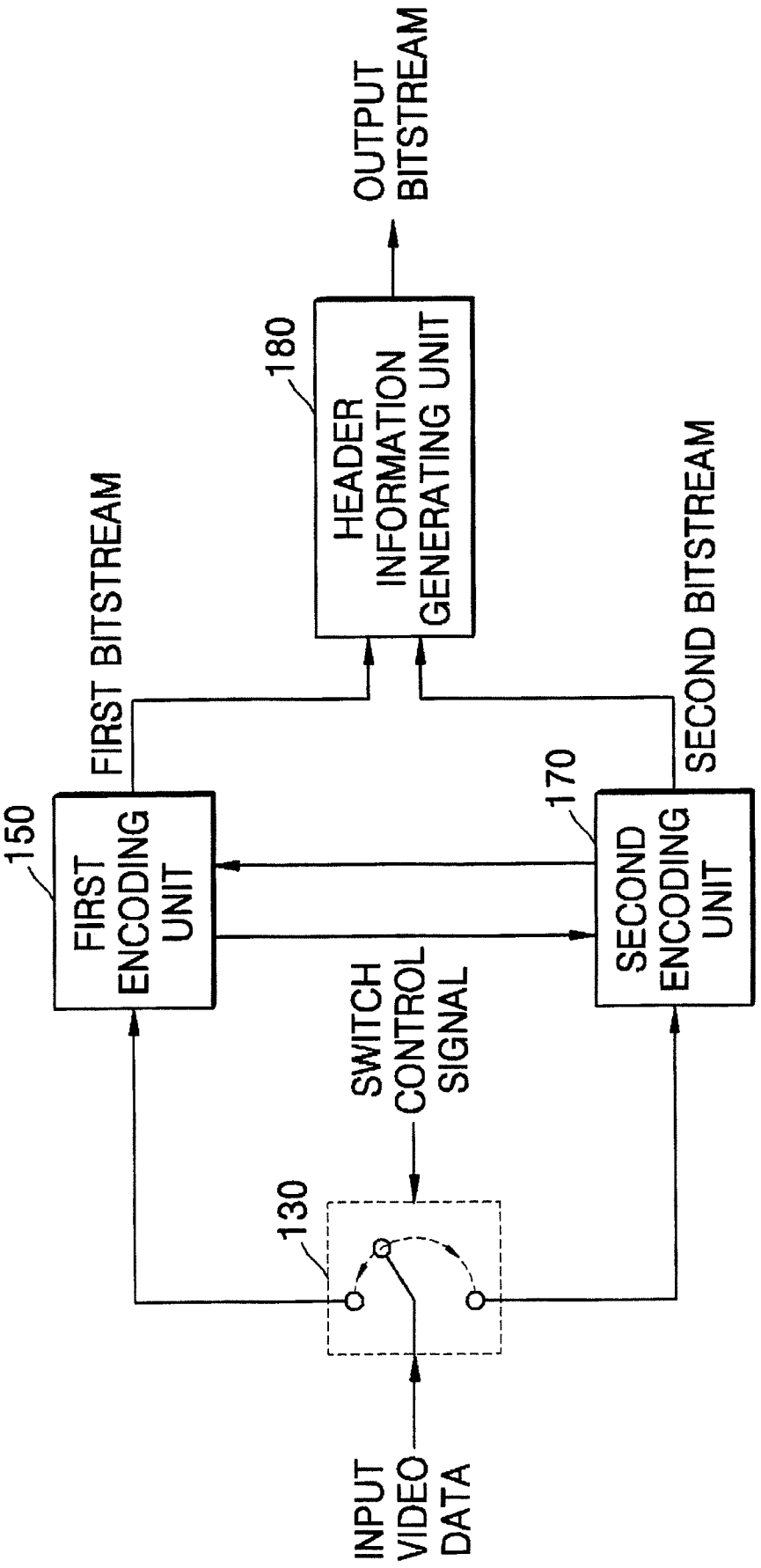

OUTPUT BITSTREAM
180
HEADER INFORMATION GENERATING UNIT
FIRST BITSTREAM
SECOND BITSTREAM
150
FIRST ENCODING UNIT
170
SECOND ENCODING UNIT
SWITCH CONTROL SIGNAL
130
INPUT VIDEO DATA

FIG. 2

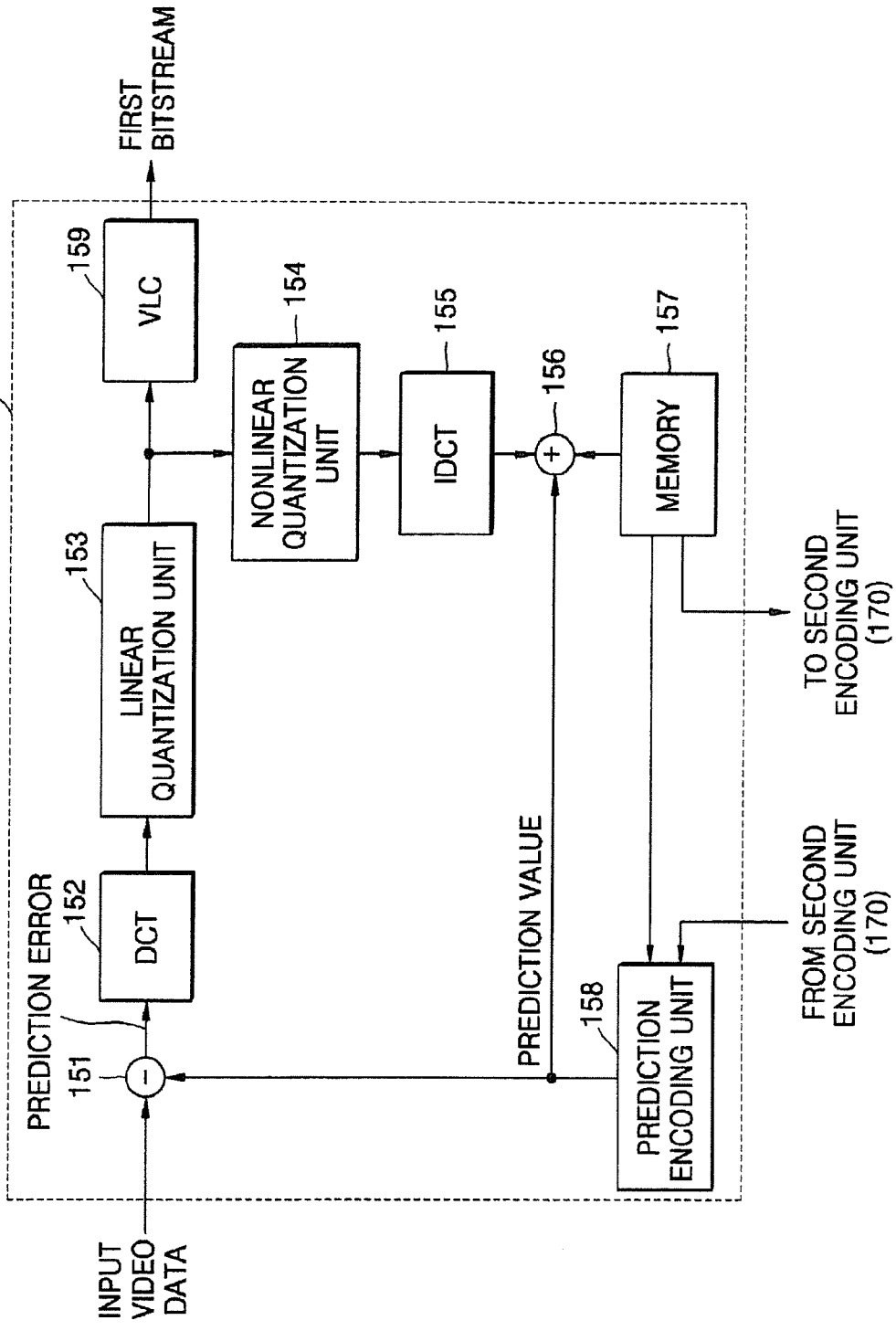

150
FIRST BITSTREAM
159
VLC
154
NONLINEAR QUANTIZATION UNIT
155
IDCT
156
157
MEMORY
153
LINEAR QUANTIZATION UNIT
PREDICTION ERROR
152
DCT
151
PREDICTION VALUE
158
PREDICTION ENCODING UNIT
INPUT VIDEO DATA
TO SECOND ENCODING UNIT (170)
FROM SECOND ENCODING UNIT (170)

FIG. 3

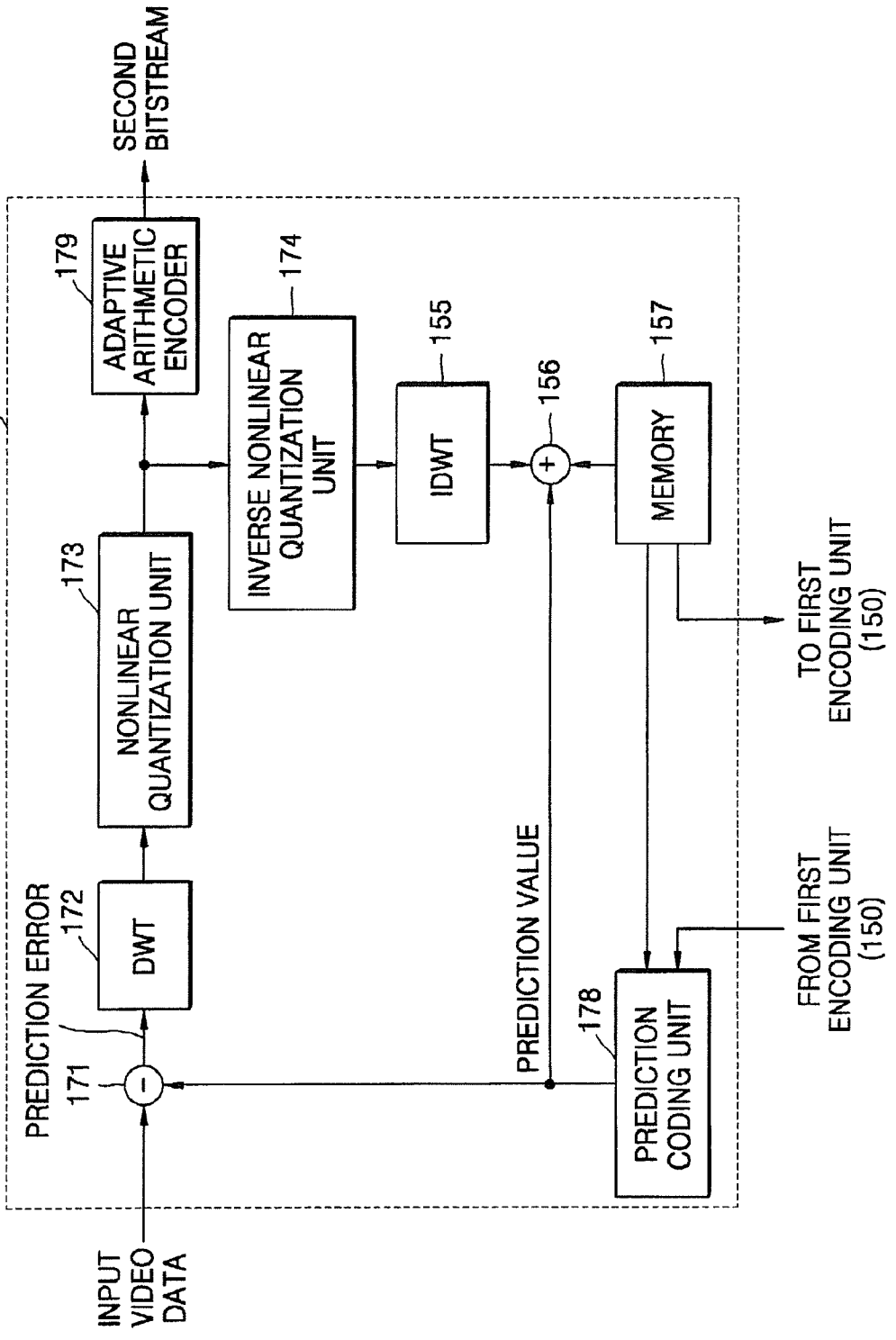

170
SECOND BITSTREAM
179
ADAPTIVE ARITHMETIC ENCODER
174
INVERSE NONLINEAR QUANTIZATION UNIT
155
IDWT
156
157
MEMORY
173
NONLINEAR QUANTIZATION UNIT
PREDICTION ERROR
172
DWT
171
PREDICTION VALUE
178
PREDICTION CODING UNIT
INPUT VIDEO DATA
TO FIRST ENCODING UNIT (150)
FROM FIRST ENCODING UNIT (150)

FIG. 4

SYNTAX TYPE	LAYER TYPE	SCALABILITY TYPE
0	0	00
0	1	01
1	0	00
1	1	10
⋮	⋮	⋮

FIG. 5

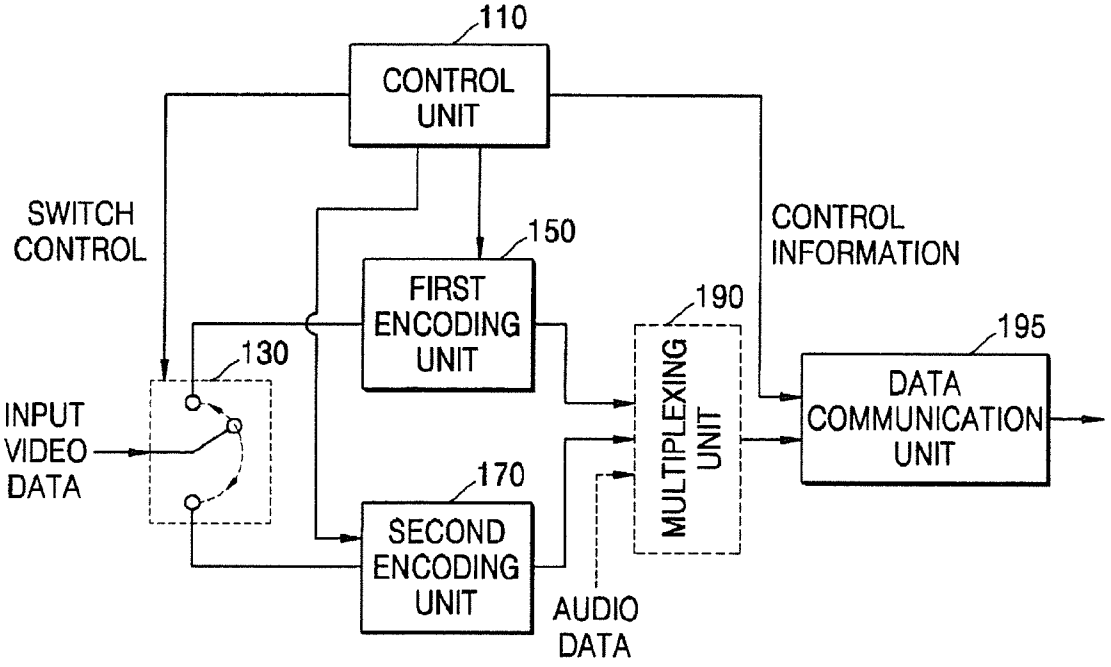


FIG. 6

INDEX	SYNTAX TYPE		LAYER TYPE		SCALABILITY TYPE	
	FIRST SYNTAX	SECOND SYNTAX	BASE LAYER	ENHANCEMENT LAYER	TEMPORAL	SPATIAL
0	O	X	O	X	X	X
1	O	X	X	O	O	X
2	O	X	X	O	X	O
⋮	⋮	⋮	⋮	⋮	⋮	⋮

FIG. 7

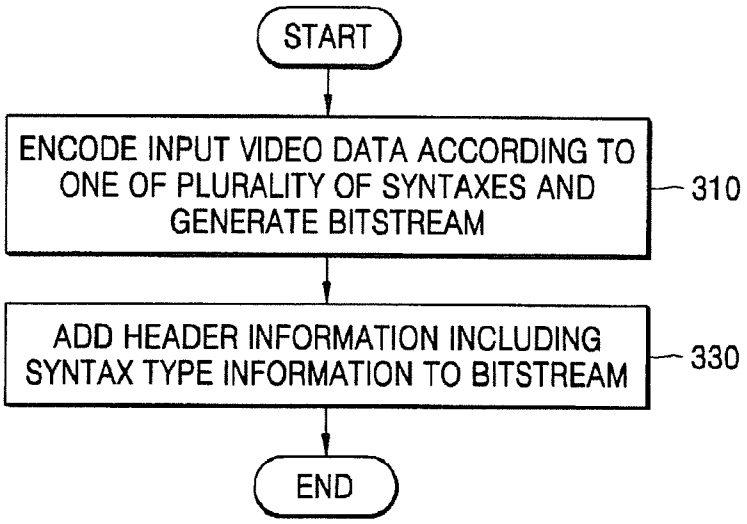


FIG. 8

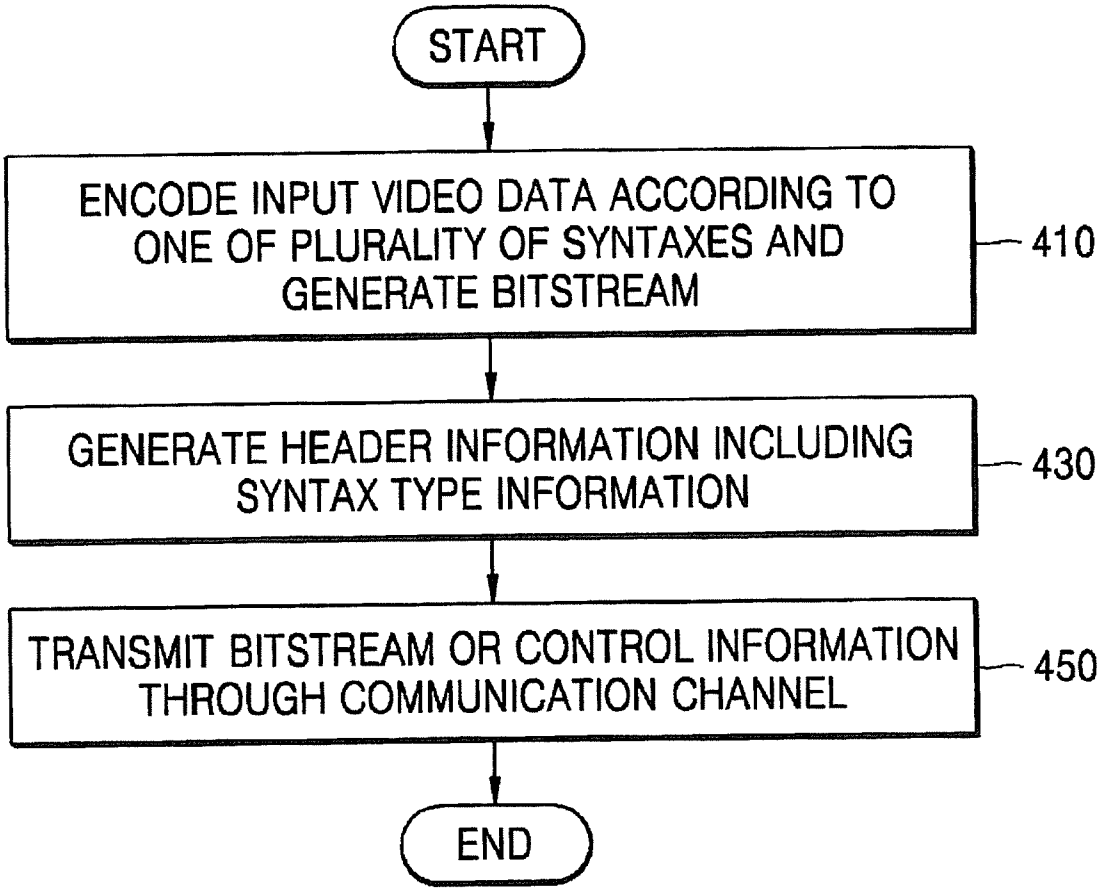

START
ENCODE INPUT VIDEO DATA ACCORDING TO ONE OF PLURALITY OF SYNTAXES AND GENERATE BITSTREAM
410
GENERATE HEADER INFORMATION INCLUDING SYNTAX TYPE INFORMATION
430
TRANSMIT BITSTREAM OR CONTROL INFORMATION THROUGH COMMUNICATION CHANNEL
450
END

FIG. 9

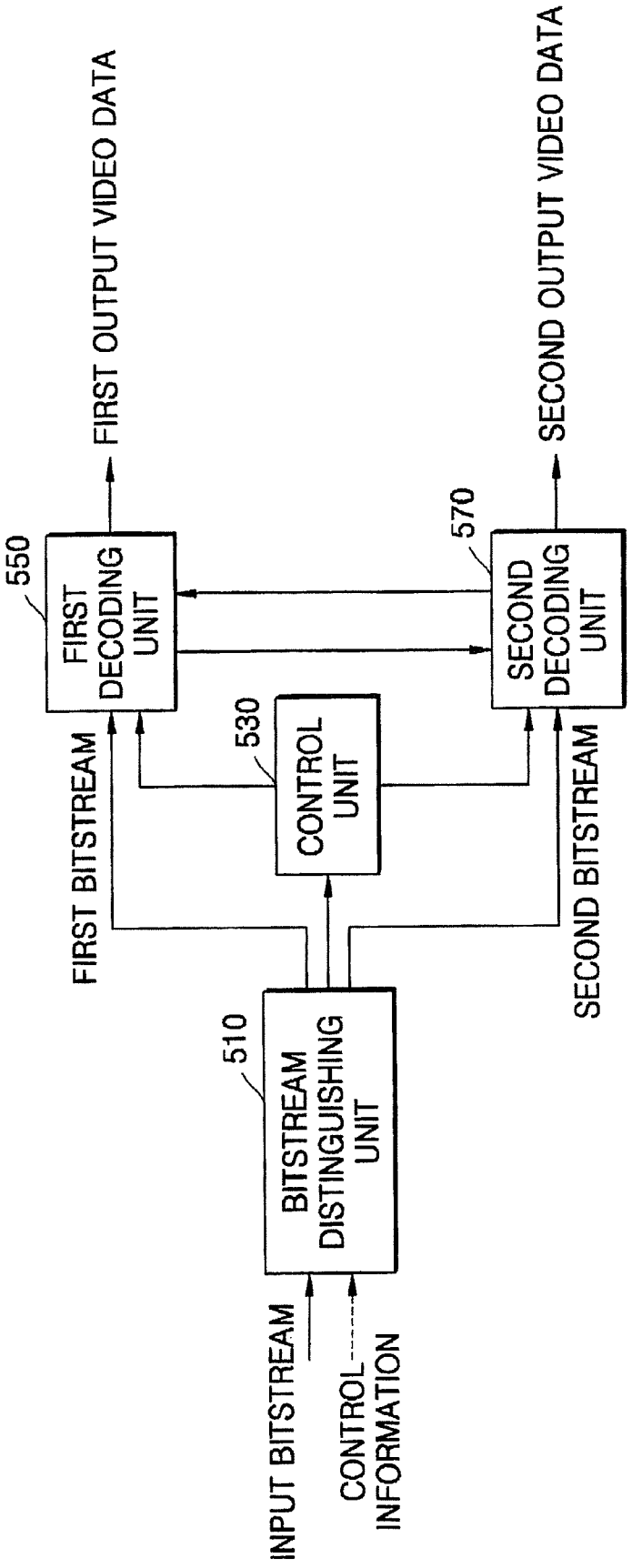
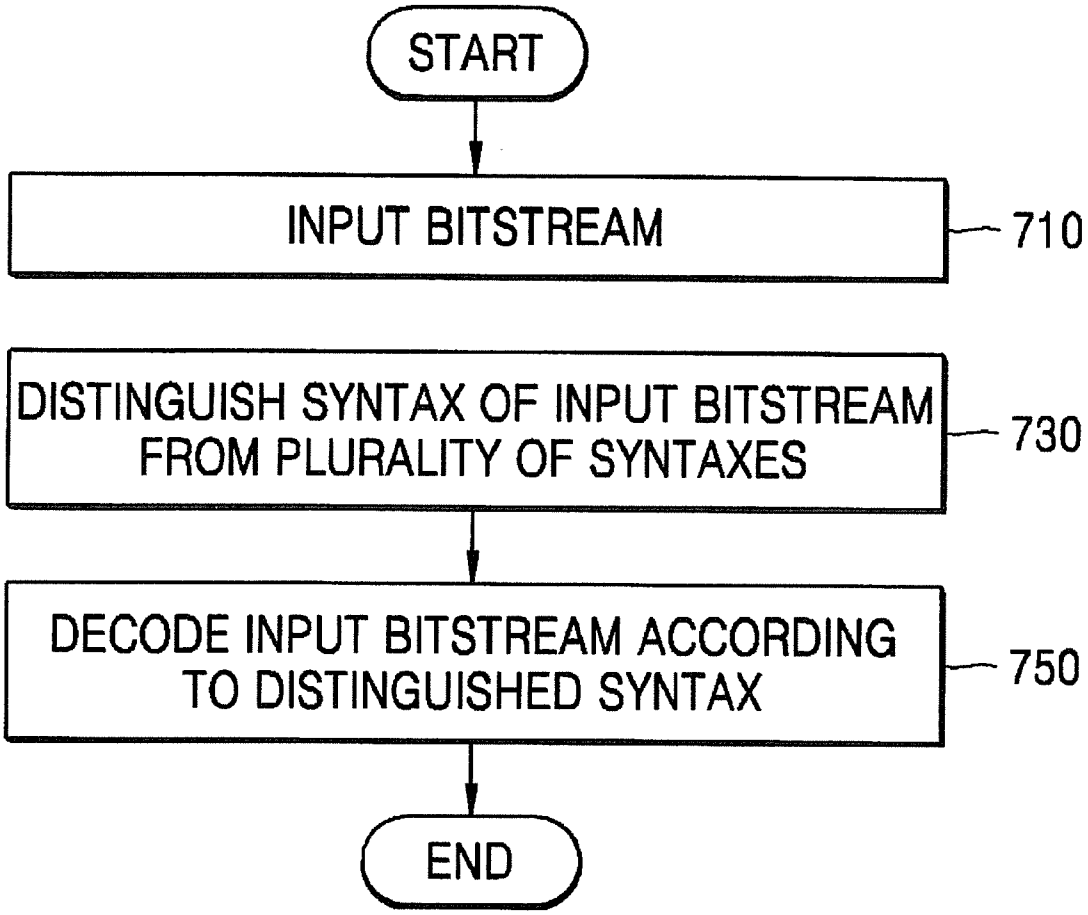

INPUT BITSTREAM
CONTROL INFORMATION
510
BITSTREAM DISTINGUISHING UNIT
FIRST BITSTREAM
SECOND BITSTREAM
530
CONTROL UNIT
550
FIRST DECODING UNIT
570
SECOND DECODING UNIT
FIRST OUTPUT VIDEO DATA
SECOND OUTPUT VIDEO DATA

FIG. 10


START
INPUT BITSTREAM
710
DISTINGUISH SYNTAX OF INPUT BITSTREAM FROM PLURALITY OF SYNTAXES
730
DECODE INPUT BITSTREAM ACCORDING TO DISTINGUISHED SYNTAX
750
END