

	R01	R02	R03	R04	R05	R06	R07	R08	R09
R10	S11	S12	S13	S14	104				
R20	S21	S22	S23	S24					
R30	S31	S32	S33	S34					
R40	S41	S42	S43	S44					
R50									
R60									
R70									

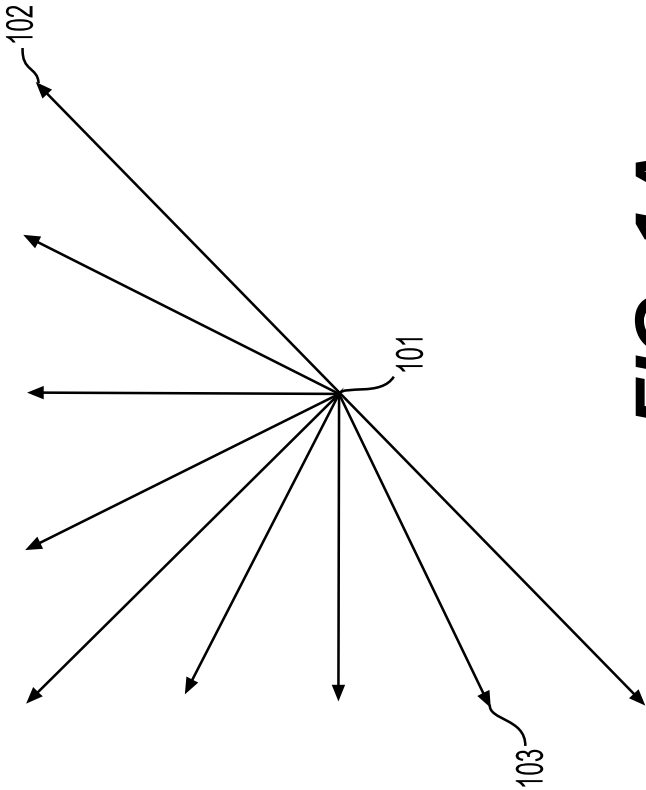
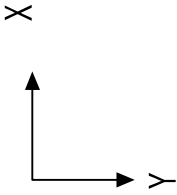


FIG. 1A

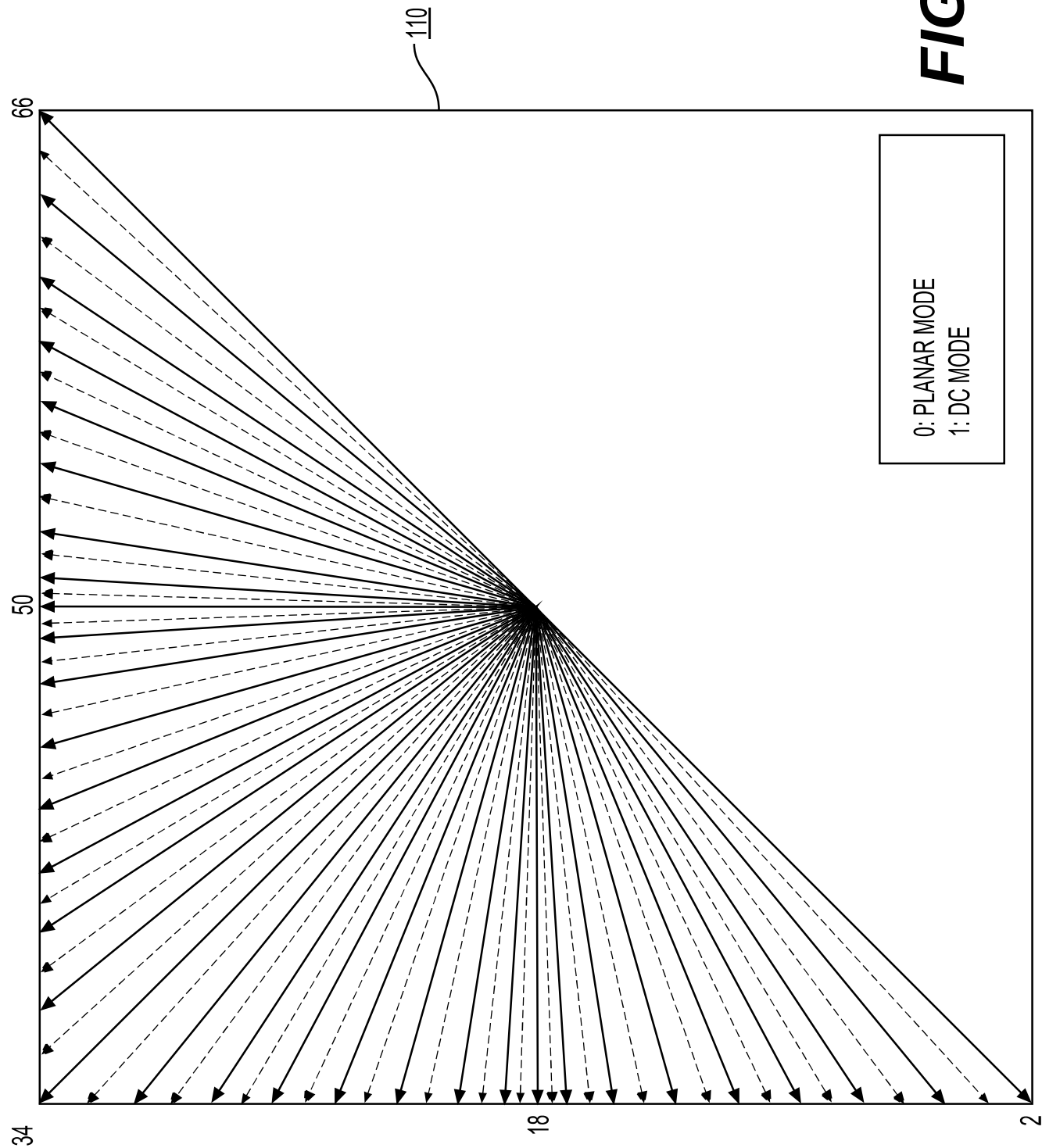


FIG. 1B

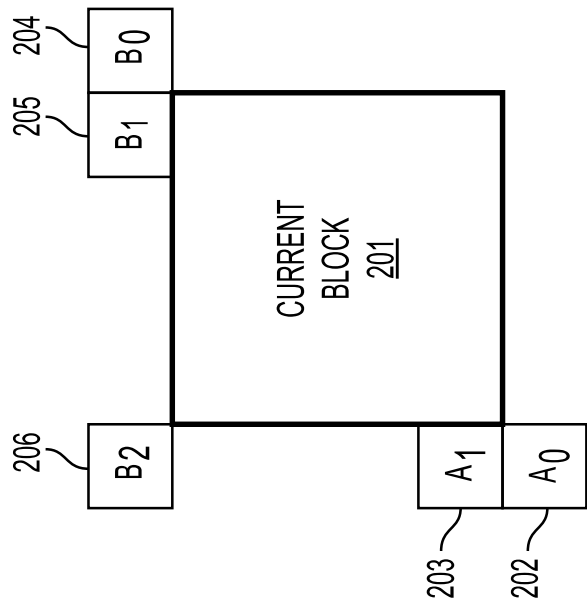
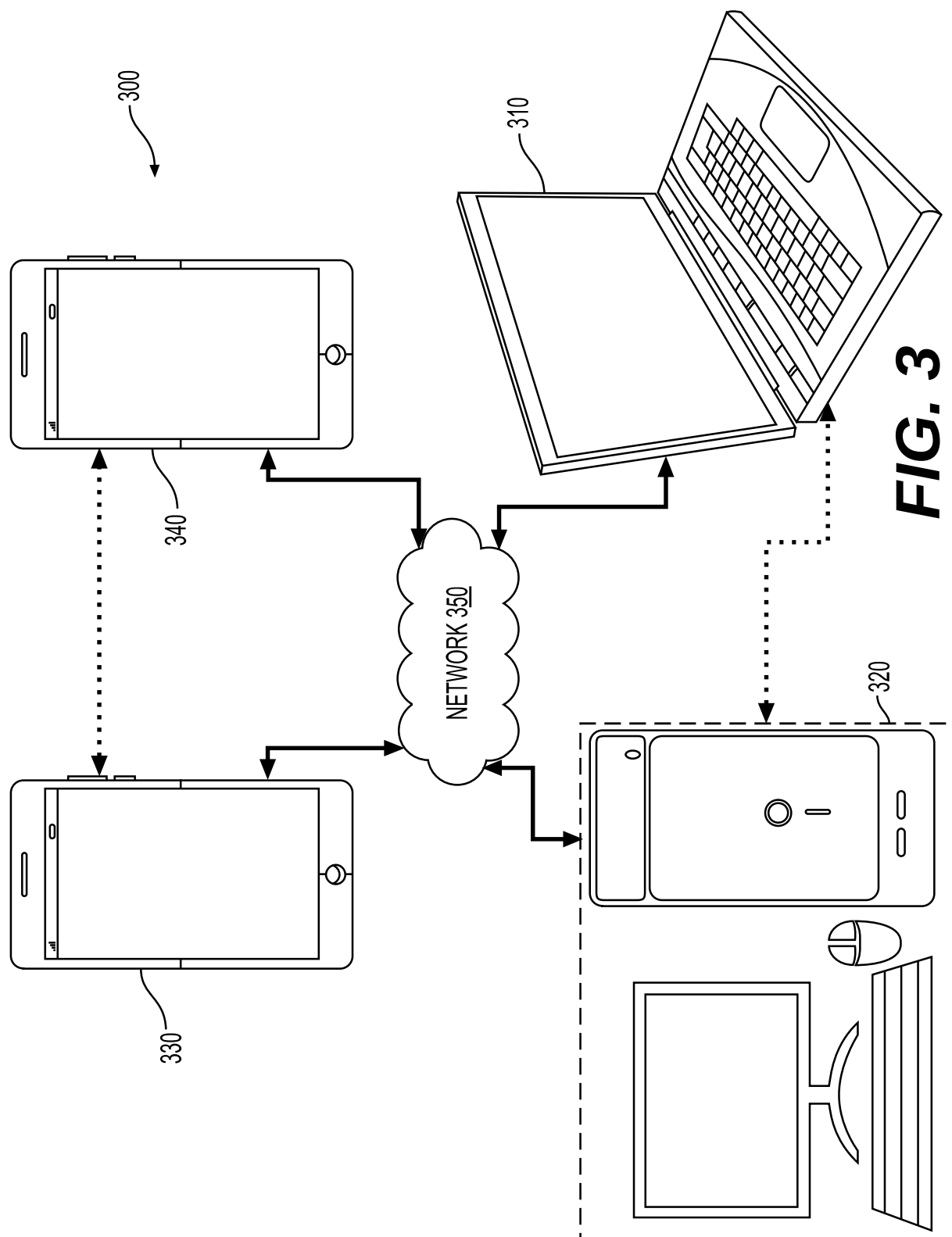


FIG. 2
(Related Art)

**FIG. 3**

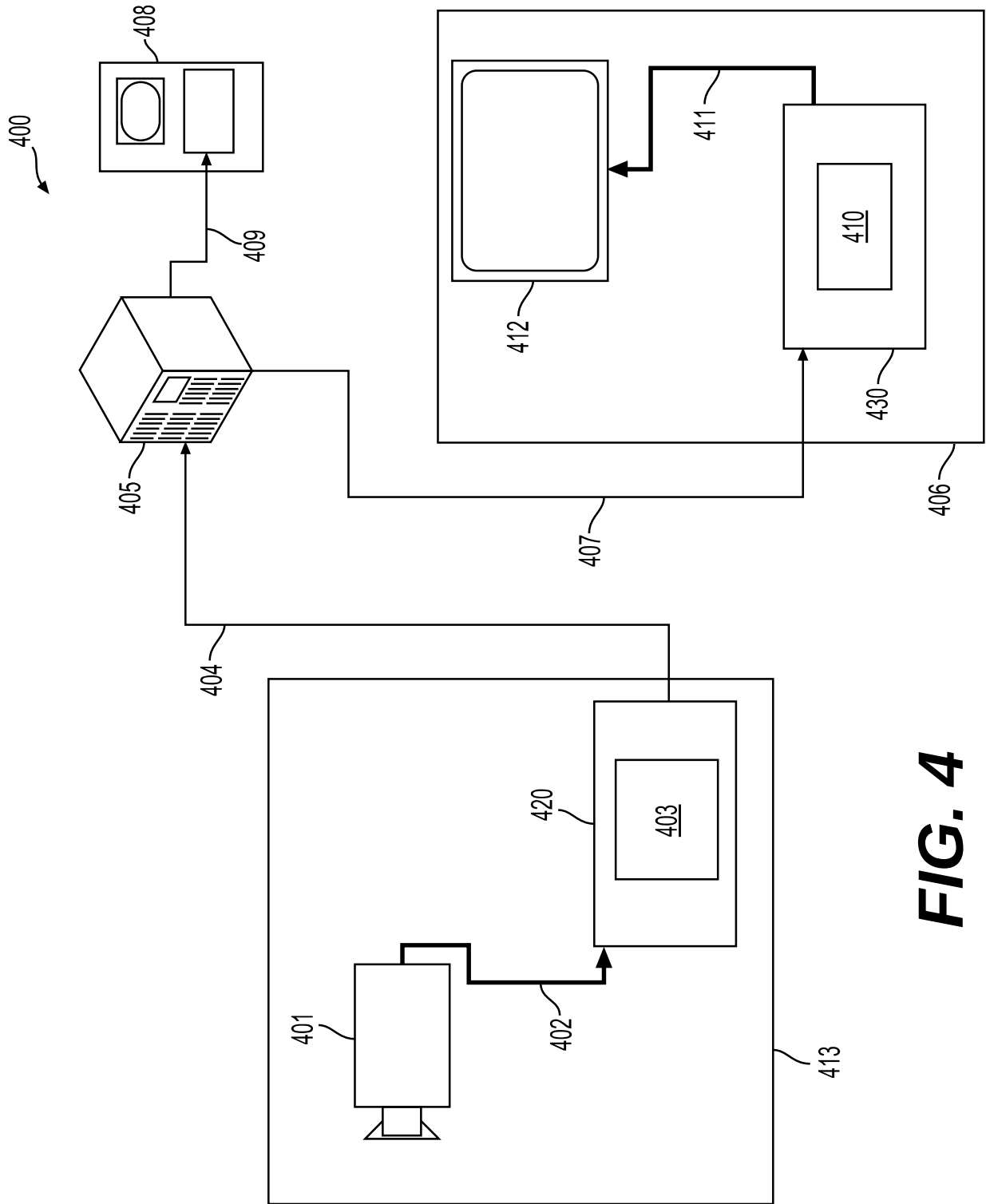


FIG. 4

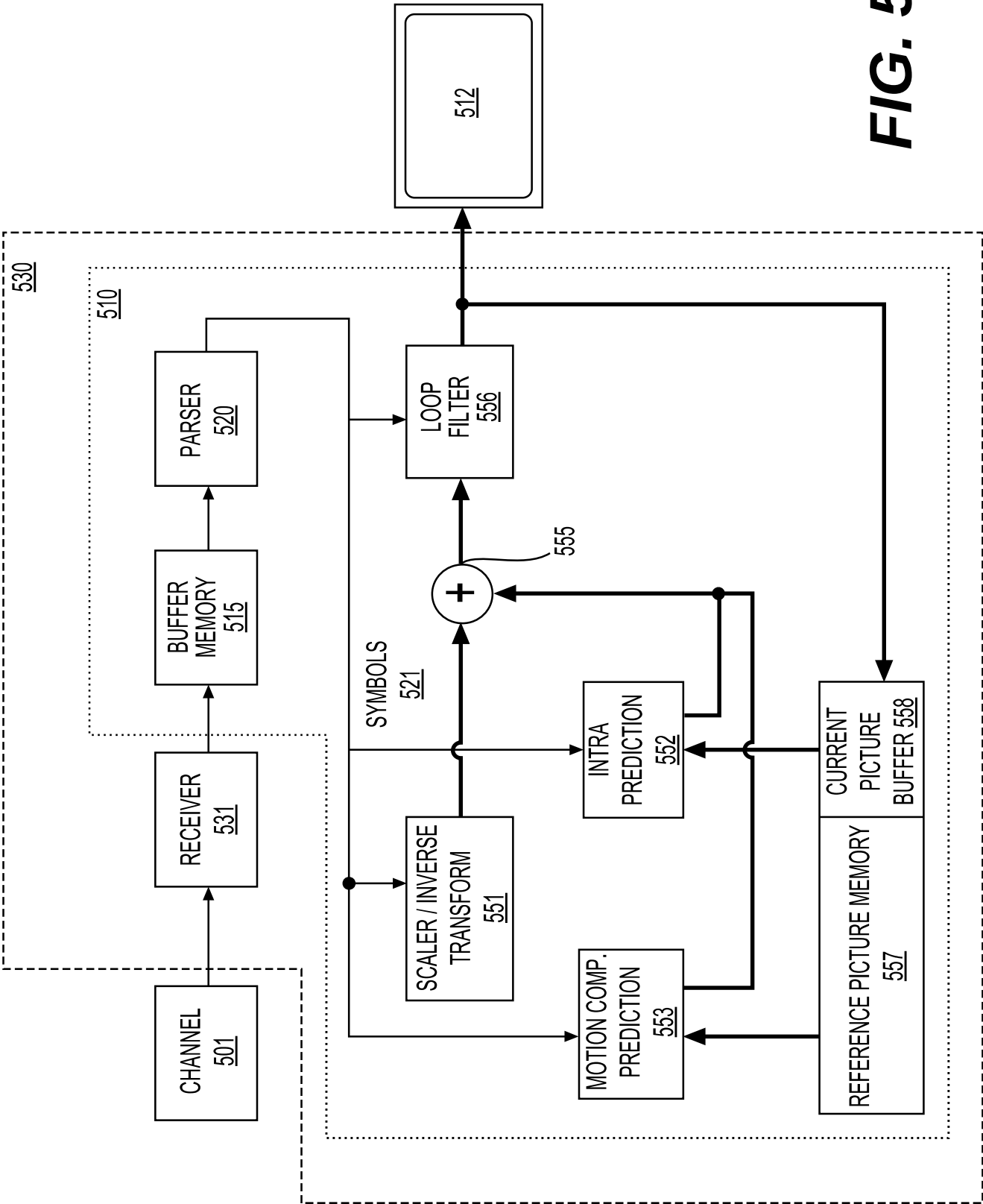
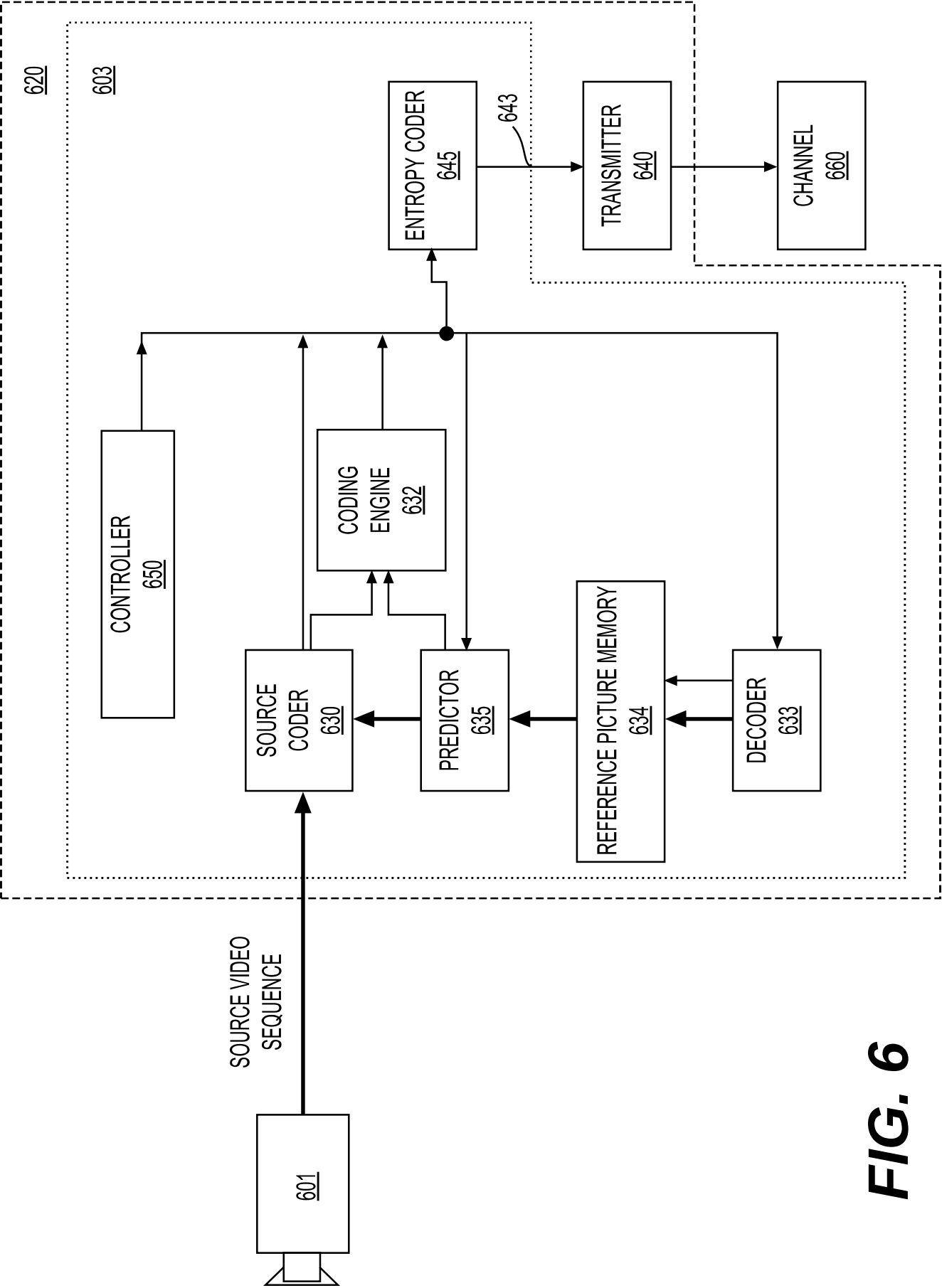
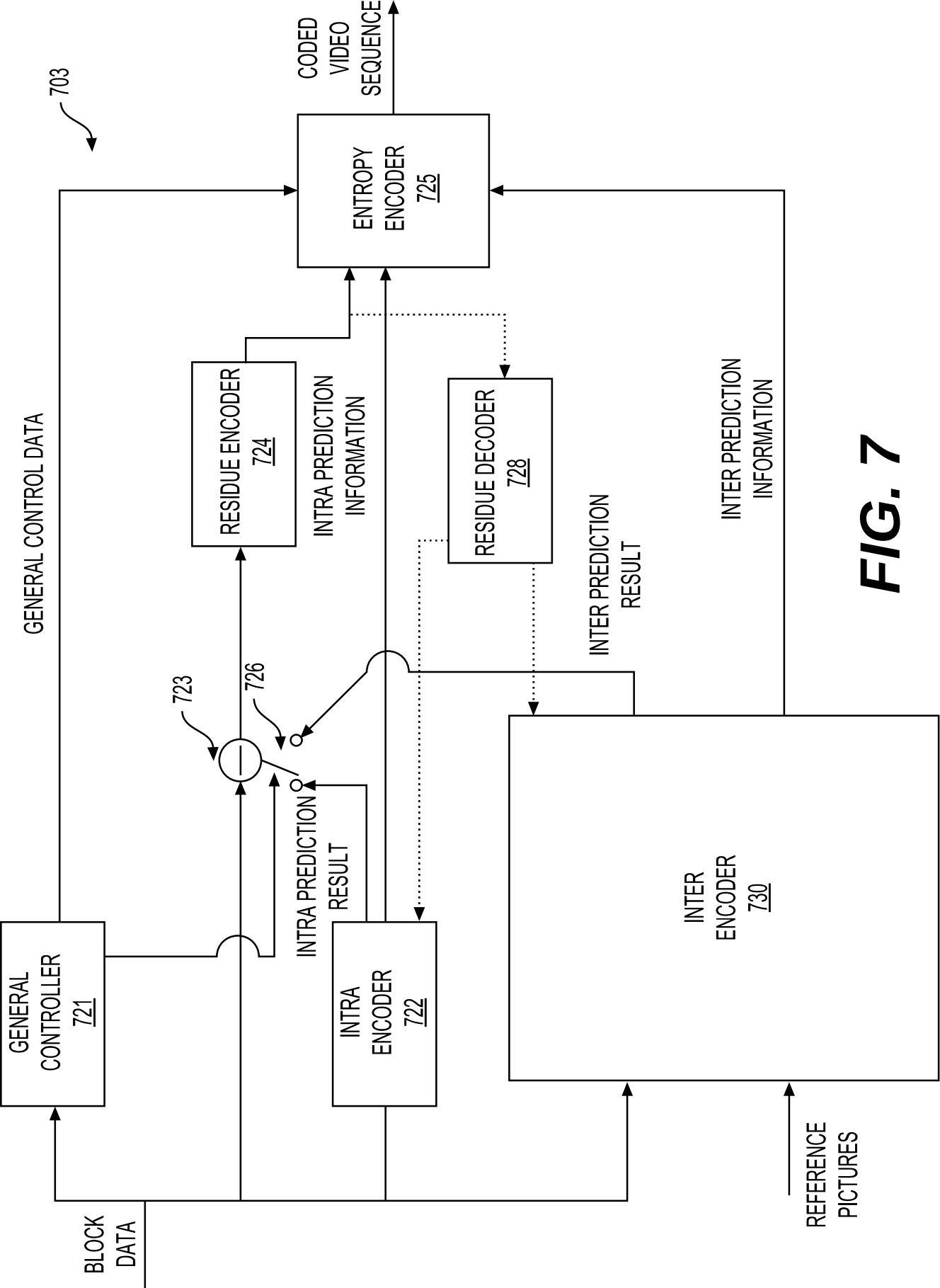


FIG. 5





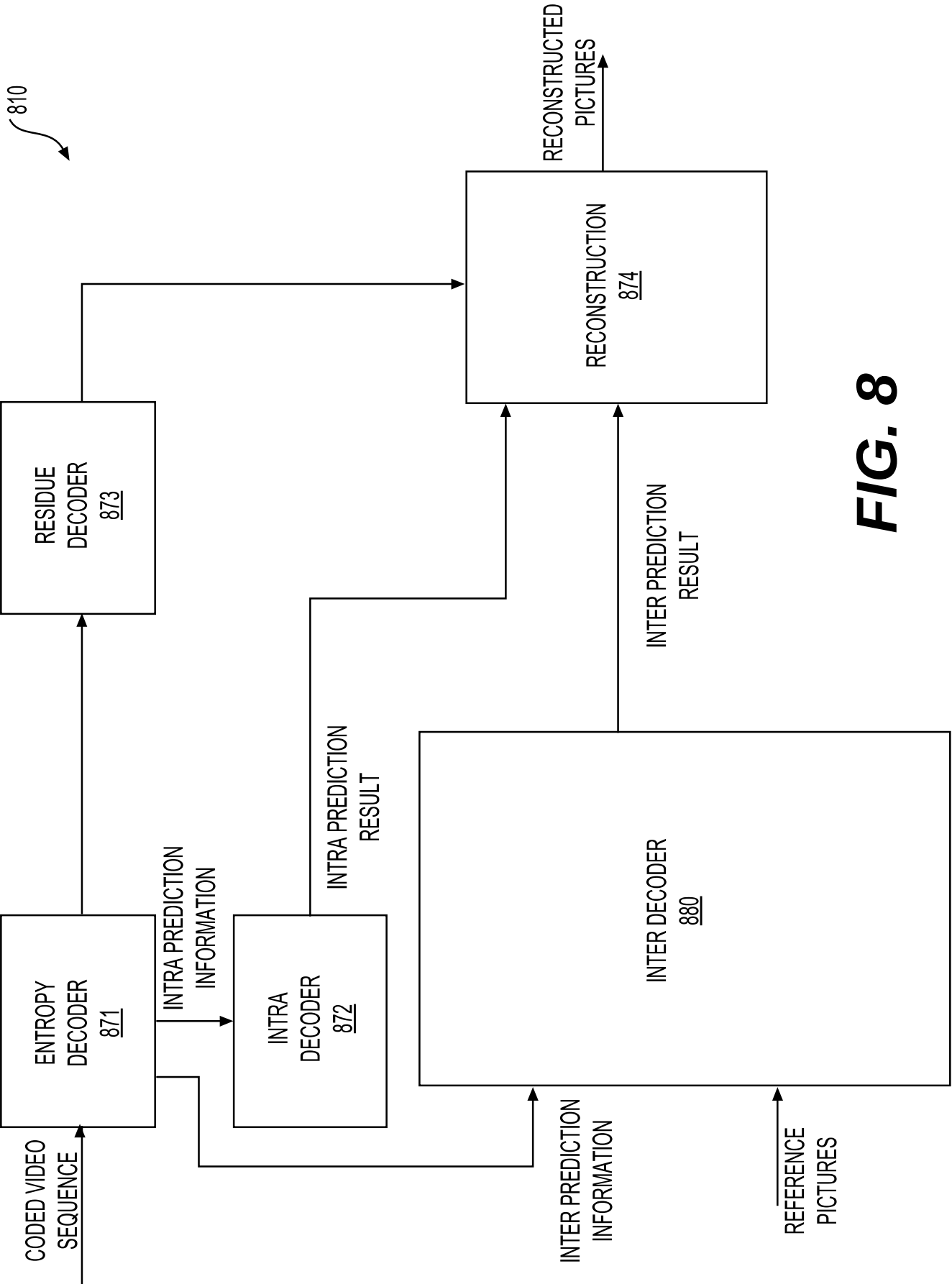


FIG. 8

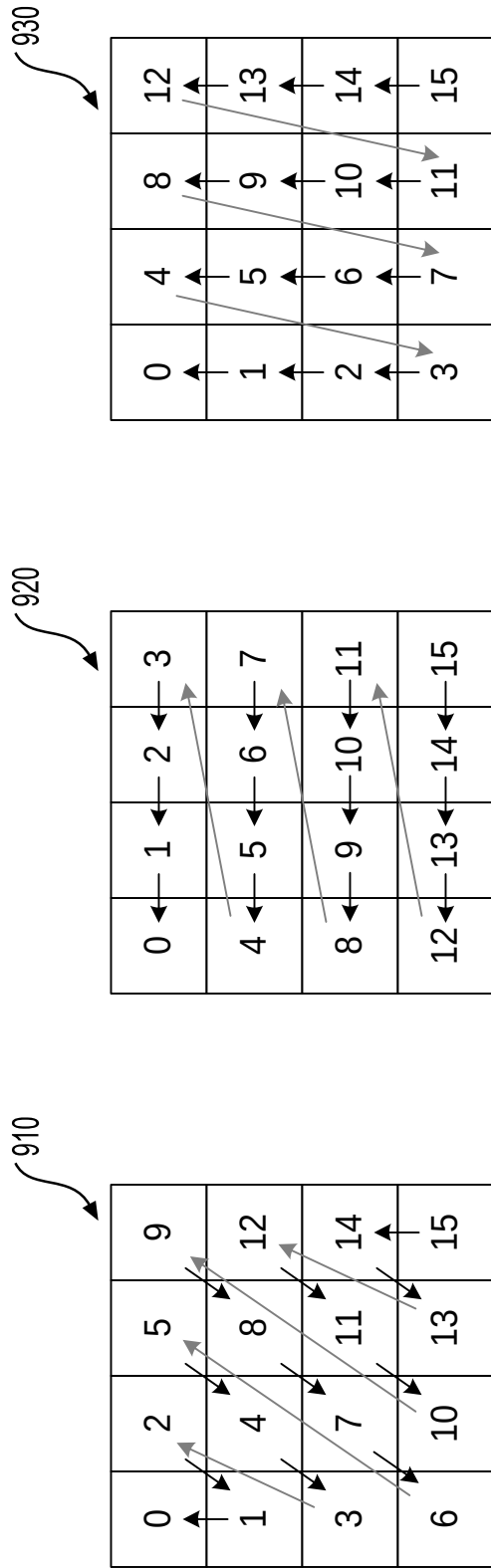


FIG. 9

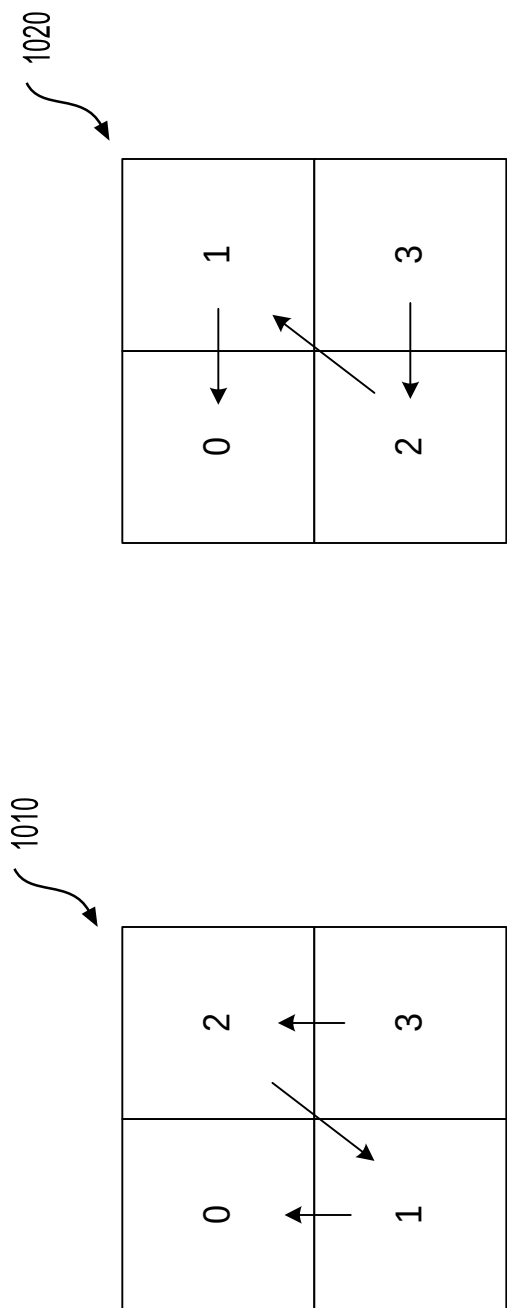
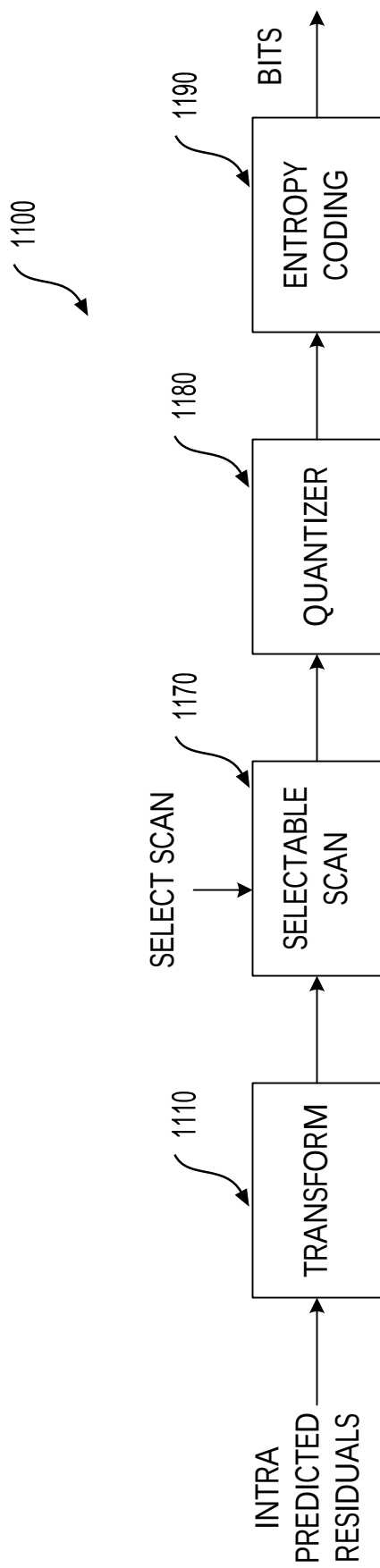


FIG. 10

**FIG. 11**

Transform basis functions of DCT-2, DST-7 and DCT-8 for N-point input

Transform Type	Basis function $T_i(j)$, $i, j=0, 1, \dots, N-1$
DCT-2	$T_i(j) = \omega_0 \cdot \sqrt{\frac{2}{N}} \cdot \cos\left(\frac{\pi \cdot i \cdot (2j + 1)}{2N}\right)$ where $\omega_0 = \begin{cases} \sqrt{\frac{2}{N}} & i = 0 \\ 1 & i \neq 0 \end{cases}$
DCT-8	$T_i(j) = \sqrt{\frac{4}{2N + 1}} \cdot \cos\left(\frac{\pi \cdot (2i + 1) \cdot (2j + 1)}{4N + 2}\right)$
DST-7	$T_i(j) = \sqrt{\frac{4}{2N + 1}} \cdot \sin\left(\frac{\pi \cdot (2i + 1) \cdot (j + 1)}{2N + 1}\right)$

FIG. 12

1300

mts_idx	Transform Kernel Function	
	Horizontal	Vertical
0	DCT-2	DCT-2
1	DST-7	DST-7
2	DCT-8	DST-7
3	DST-7	DCT-8
4	DCT-8	DCT-8

FIG. 13

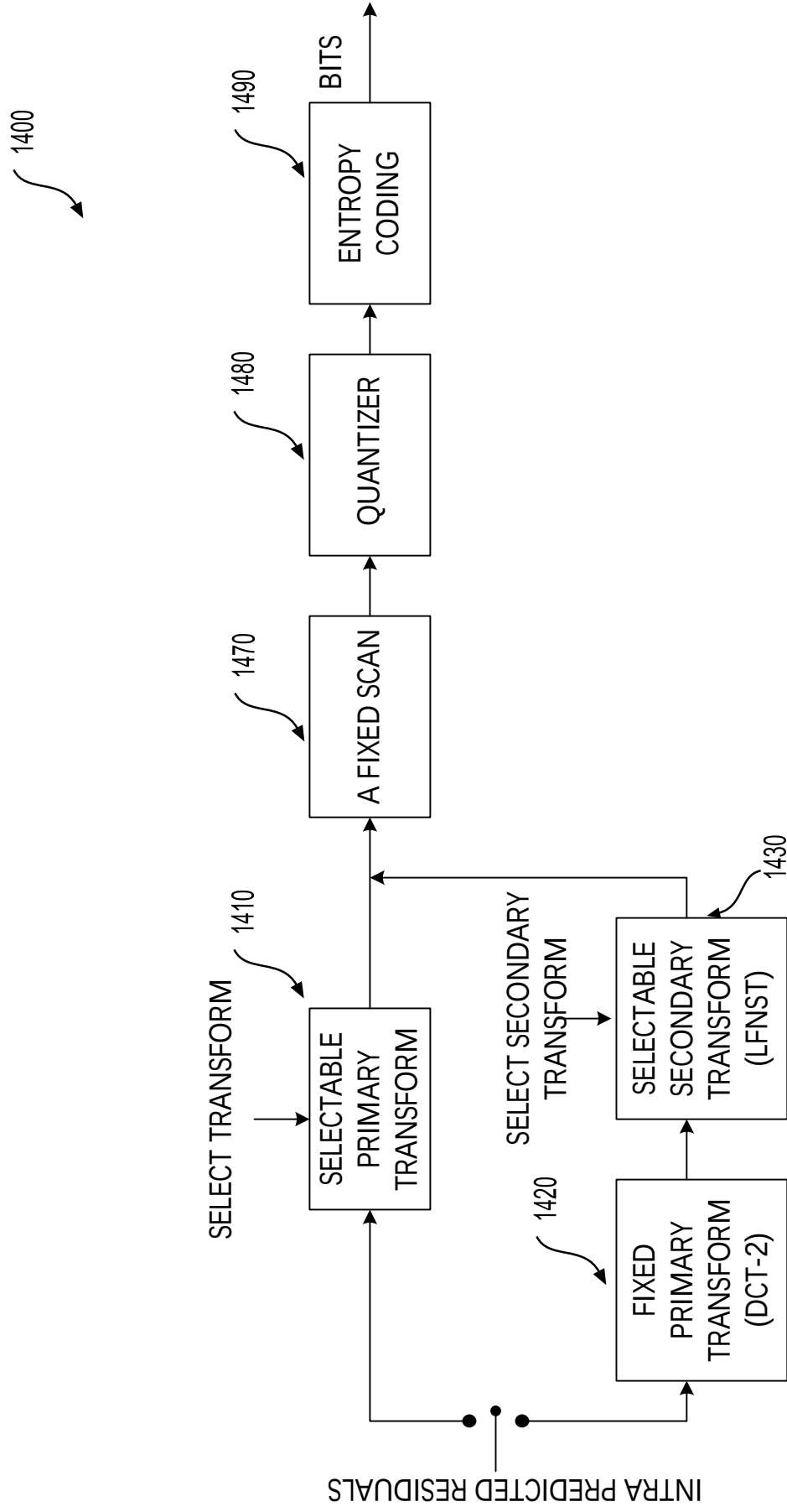


FIG. 14

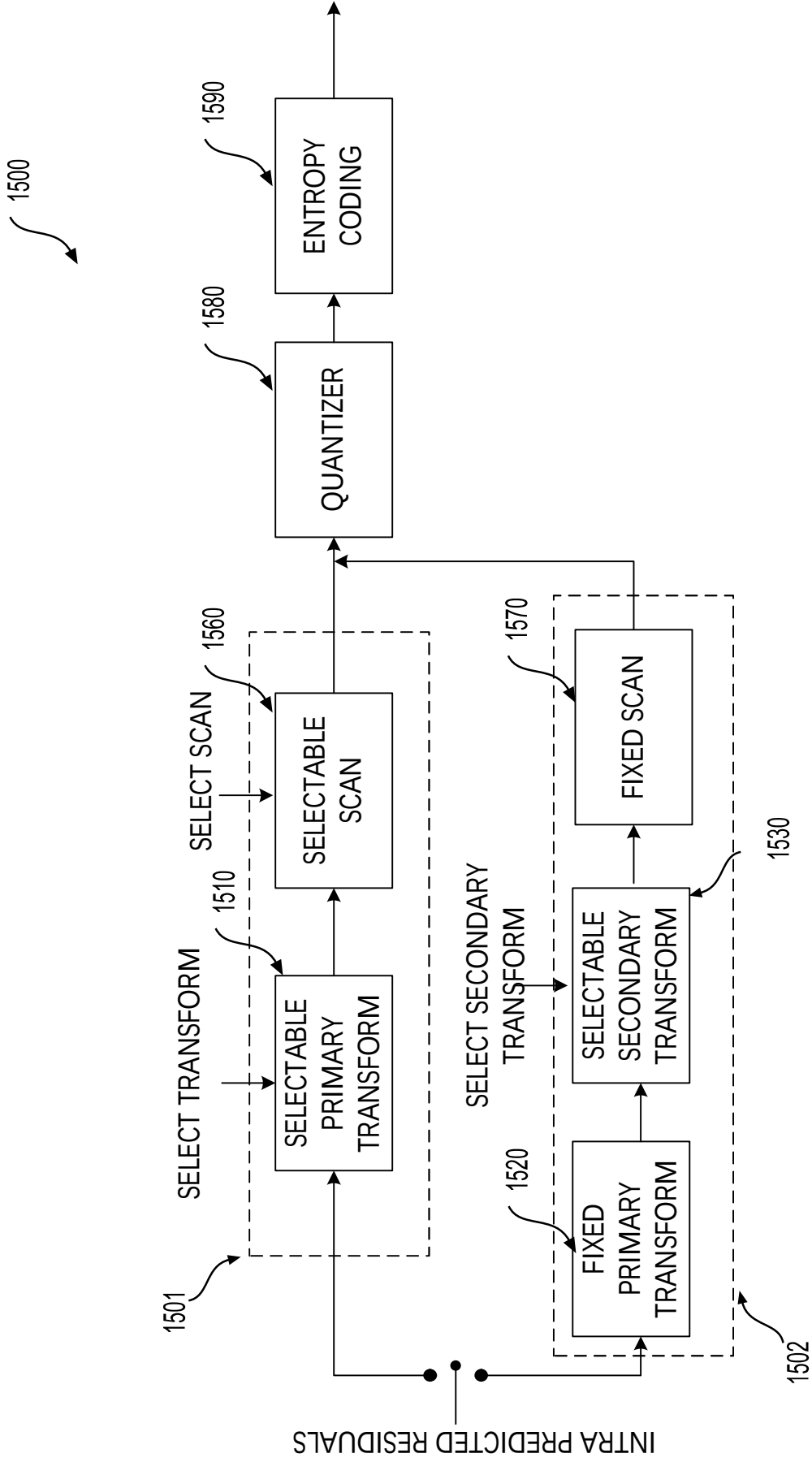


FIG. 15

	Transform Kernel		
mts_idx	Horizontal	Vertical	Scan Pattern
0	DCT-2	DCT-2	Reverse Diagonal
1	DST-7	DST-7	Reverse Diagonal
2	DST-7	DST-7	Reverse Horizontal
3	DST-7	DST-7	Reverse Vertical

1600

FIG. 16

1700

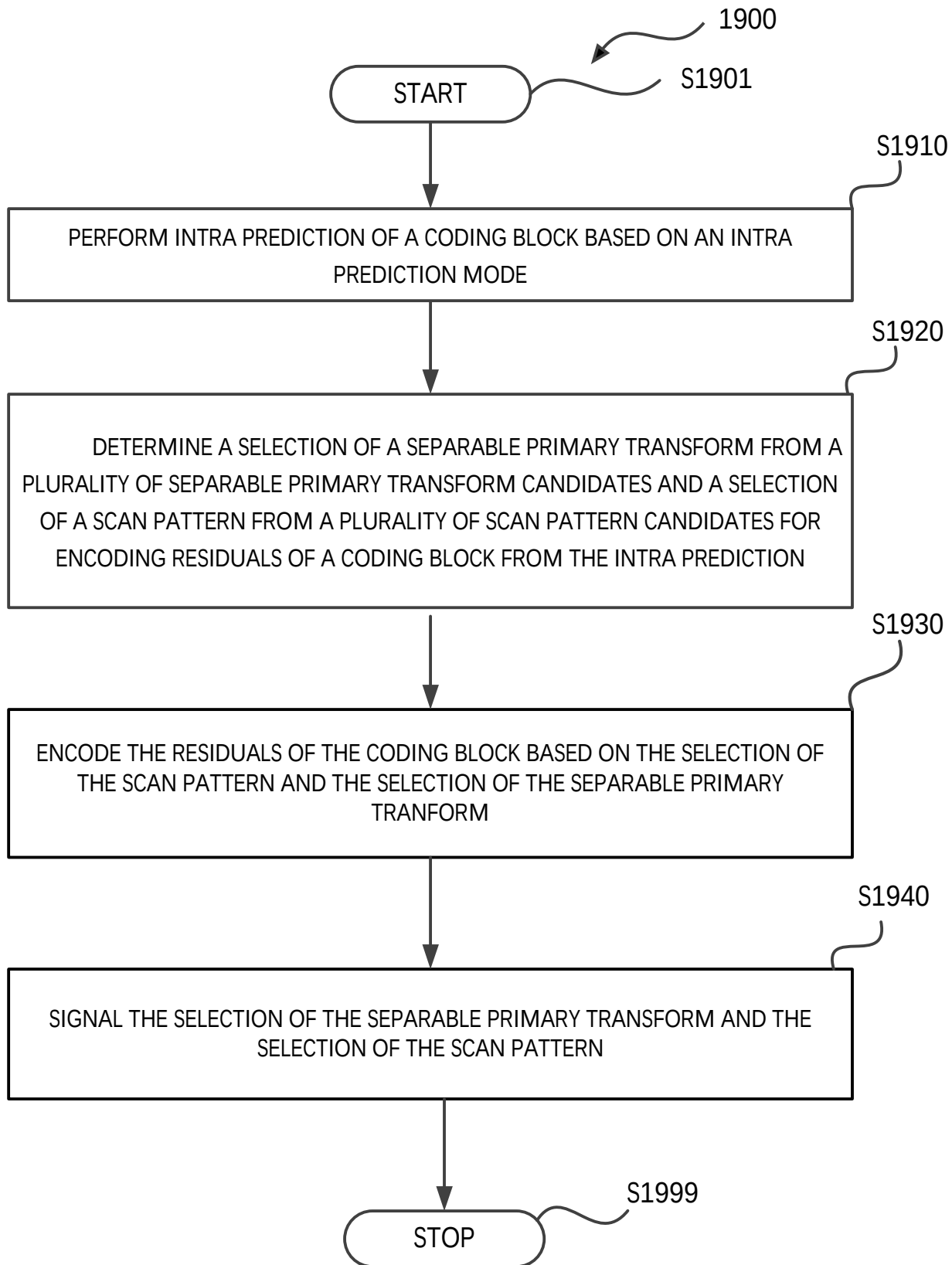
mts_idx	Transform Kernel		Scan Pattern
	Horizontal	Vertical	
0	DCT-2	DCT-2	Reverse Diagonal
1	DST-7	DST-7	Reverse Diagonal
2	DCT-2	DCT-2	Reverse Vertical
3	DST-7	DST-7	Reverse Vertical
4	DCT-2	DCT-2	Reverse Horizontal
5	DST-7	DST-7	Reverse Horizontal

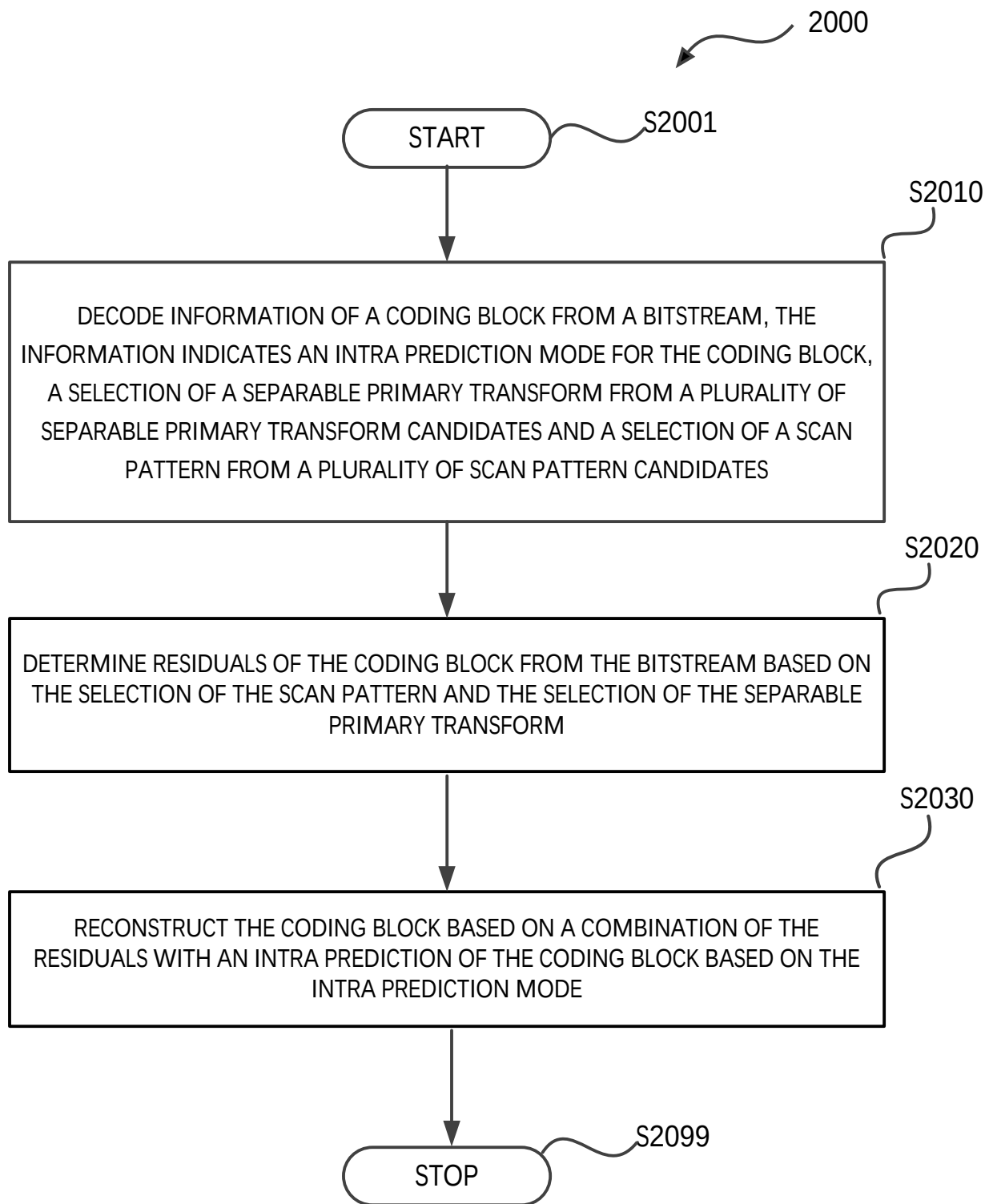
FIG. 17

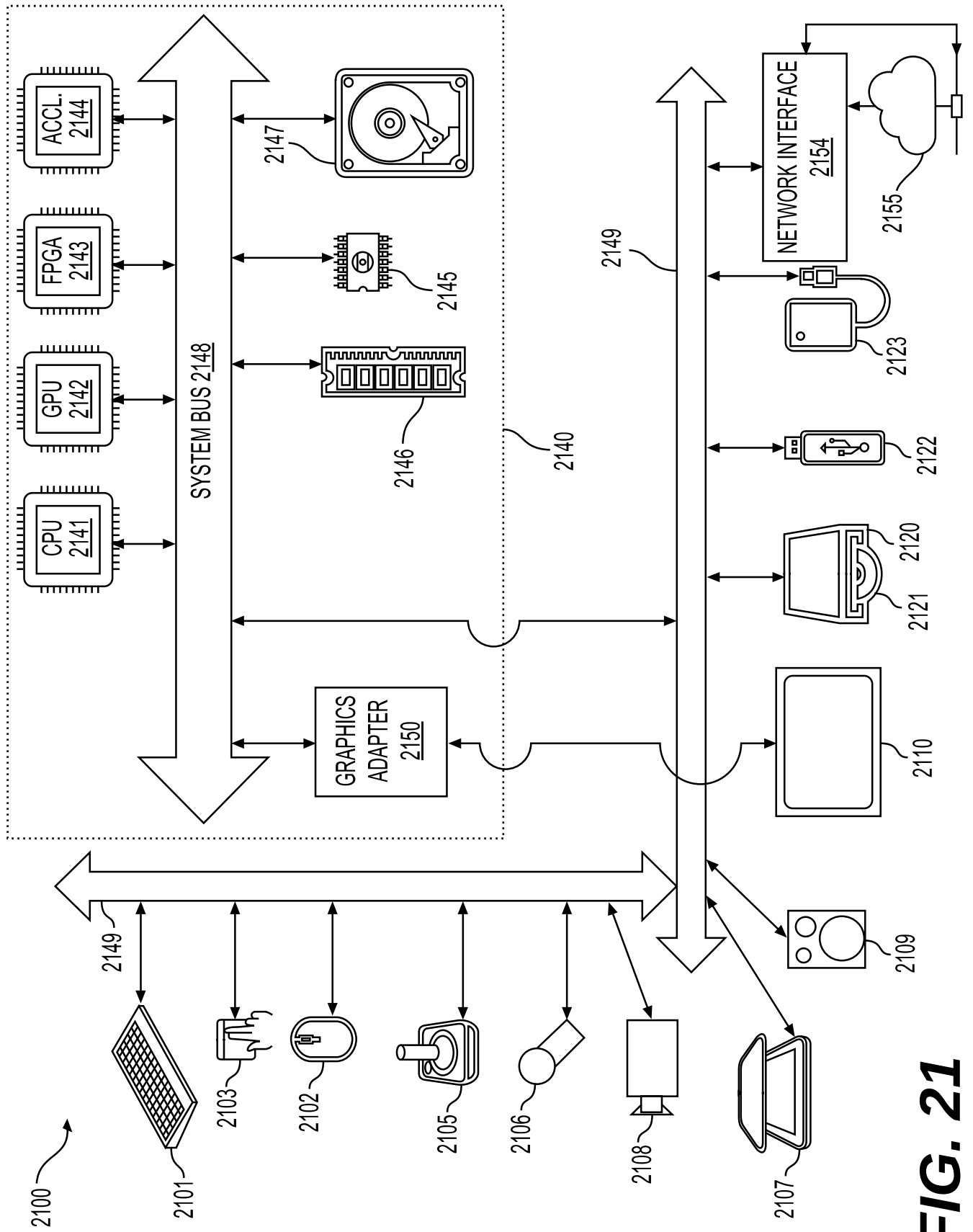
1800

mts_idx	Transform Kernel		Scan Pattern
	Horizontal	Vertical	
0	DCT2	DCT2	Intra mode dependent
1	DST7	DST7	Intra mode dependent

FIG. 18

**FIG. 19**

**FIG. 20**

**FIG. 21**