

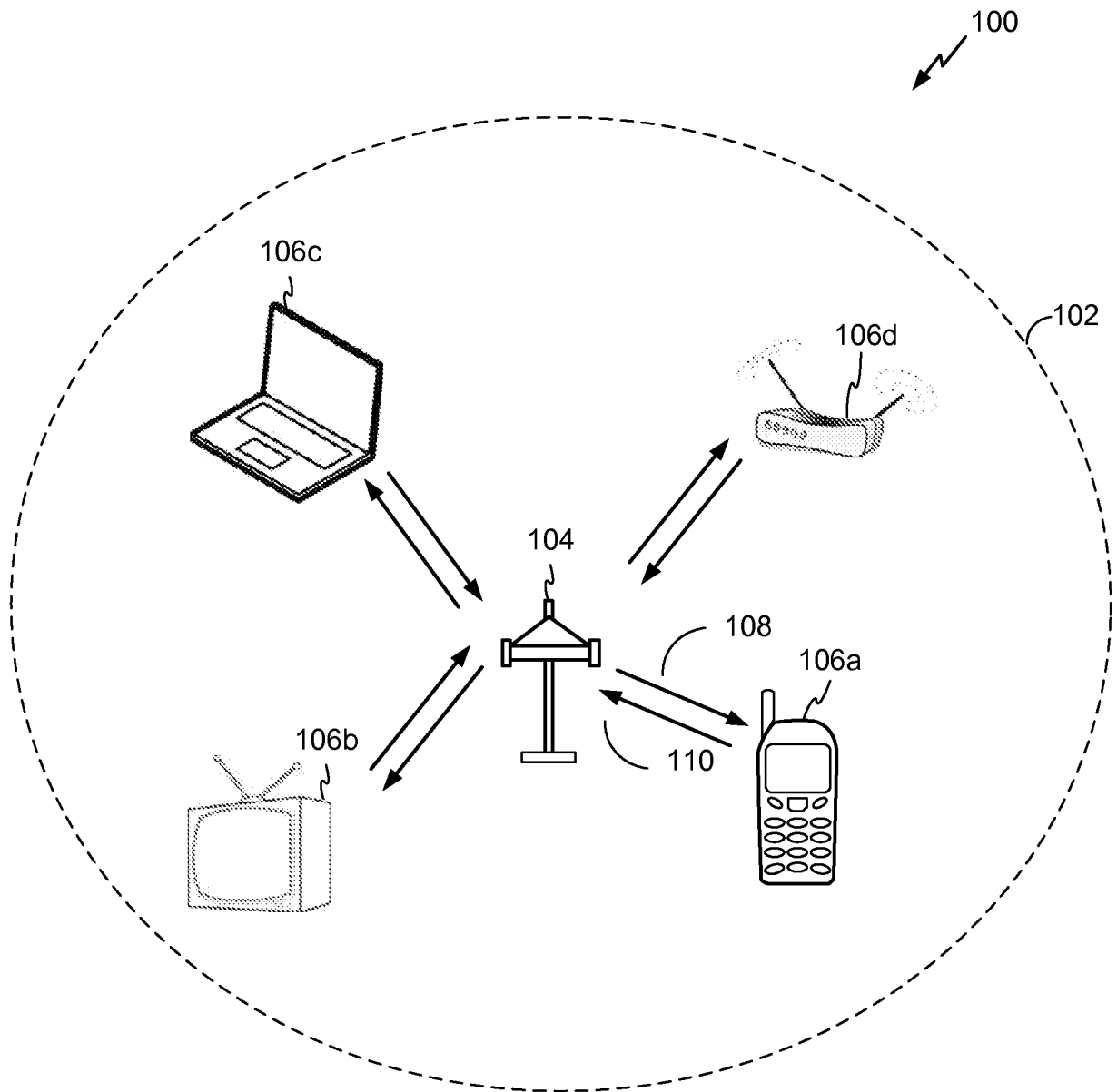


FIG. 1

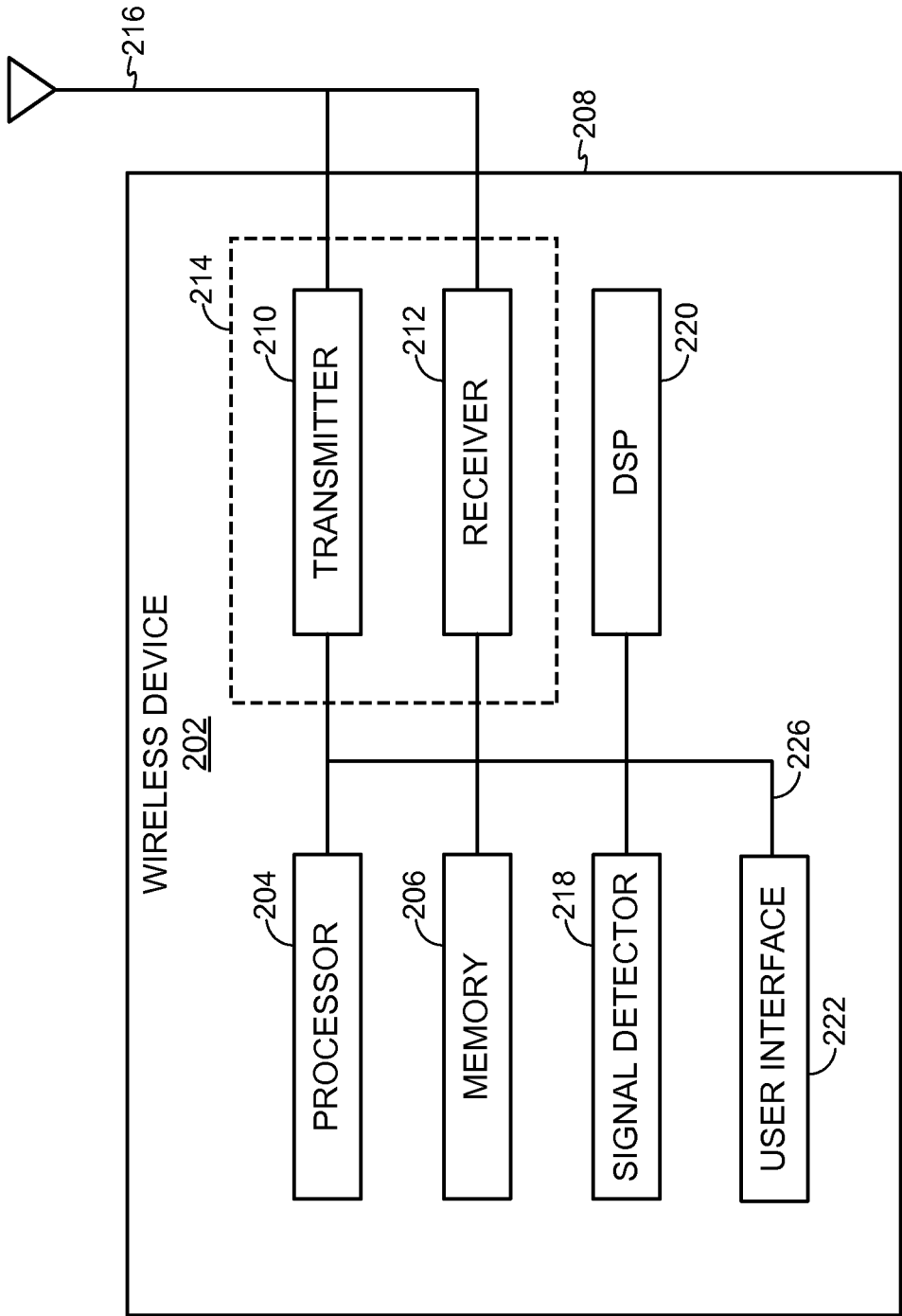


FIG. 2

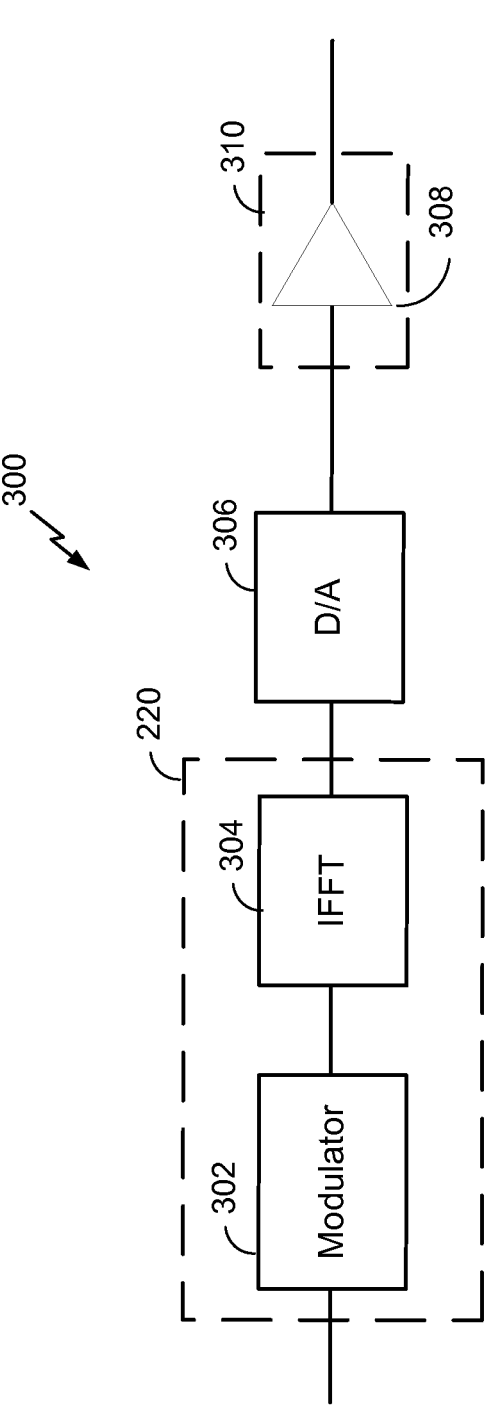


FIG. 3

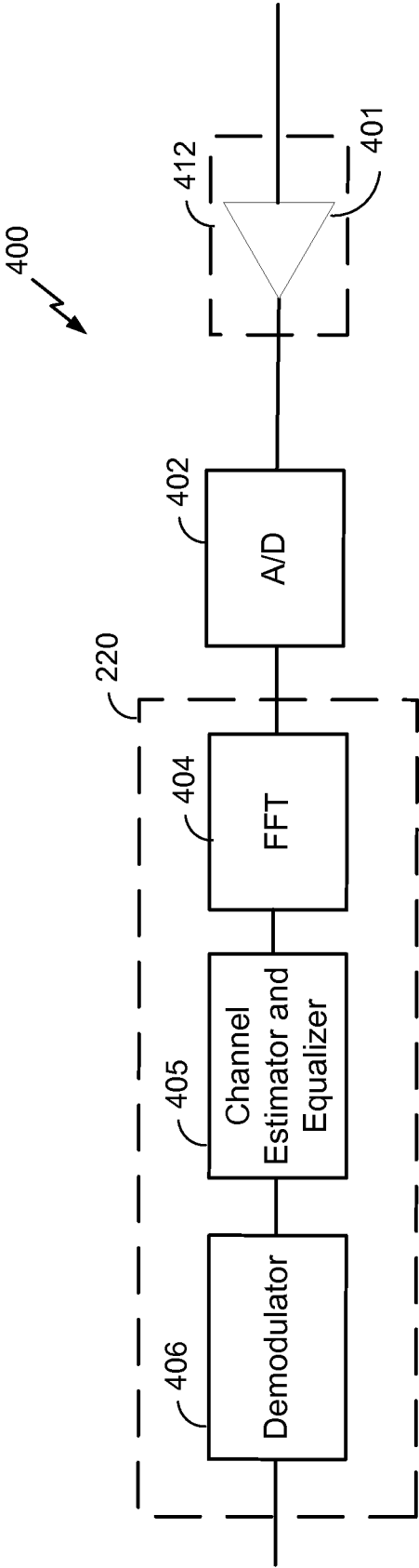


FIG. 4

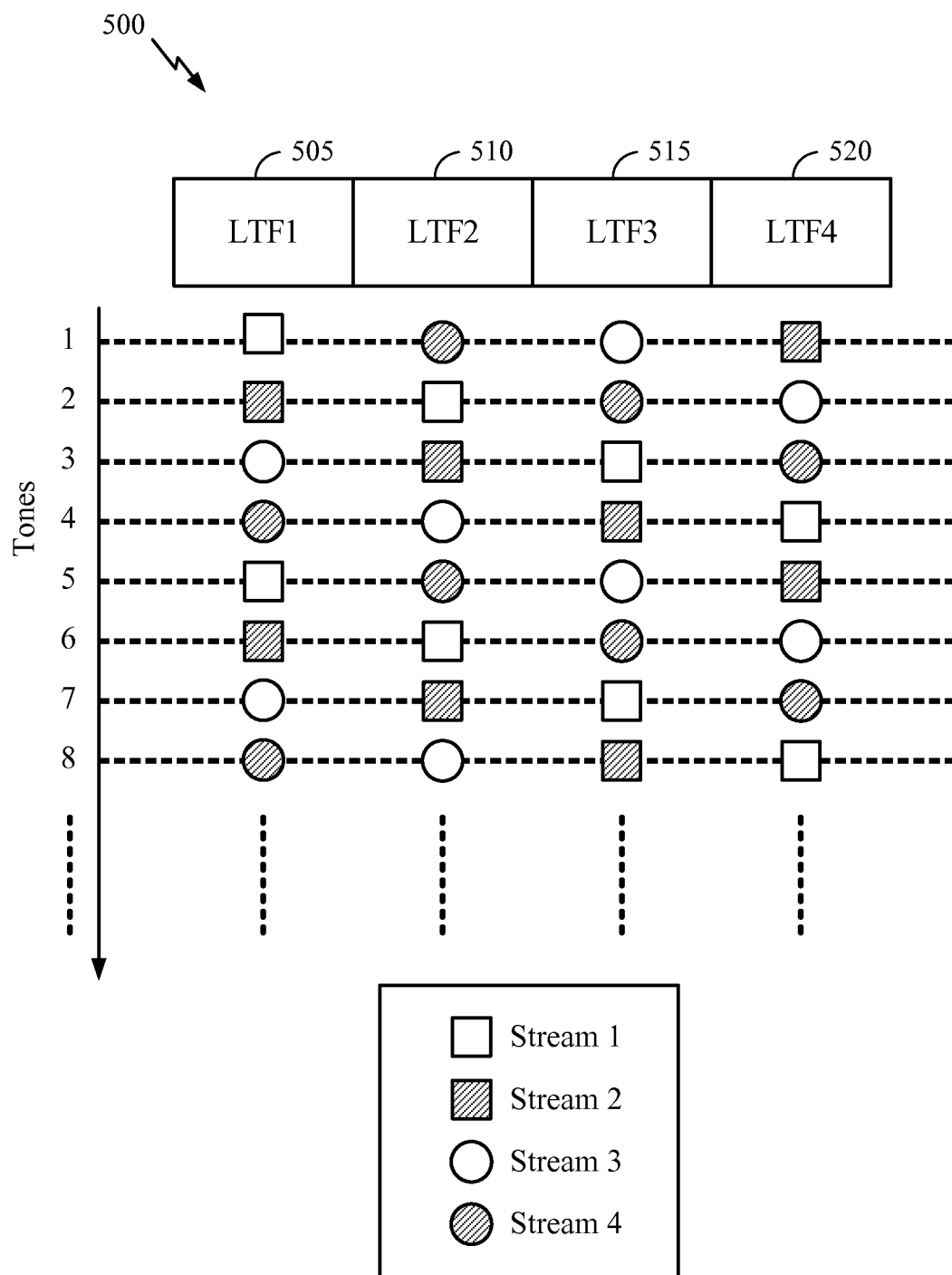


FIG. 5

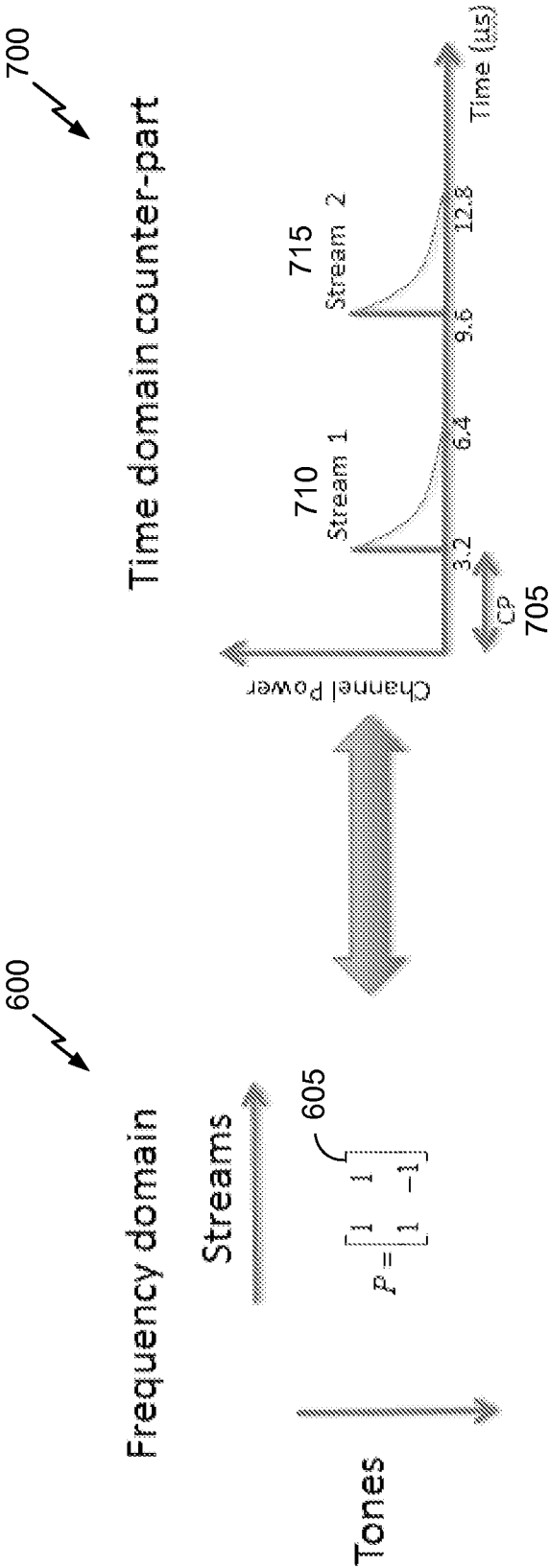


FIG. 6

FIG. 7

800 ↗

DC Tones	LTF1 805	LTF2 810	LTF3 815	LTF4 820
	Group 1	Group 4	Group 3	Group 2
	Group 2	Group 1	Group 4	Group 3
	Group 3	Group 2	Group 1	Group 4
	Group 4	Group 3	Group 2	Group 1

FIG. 8

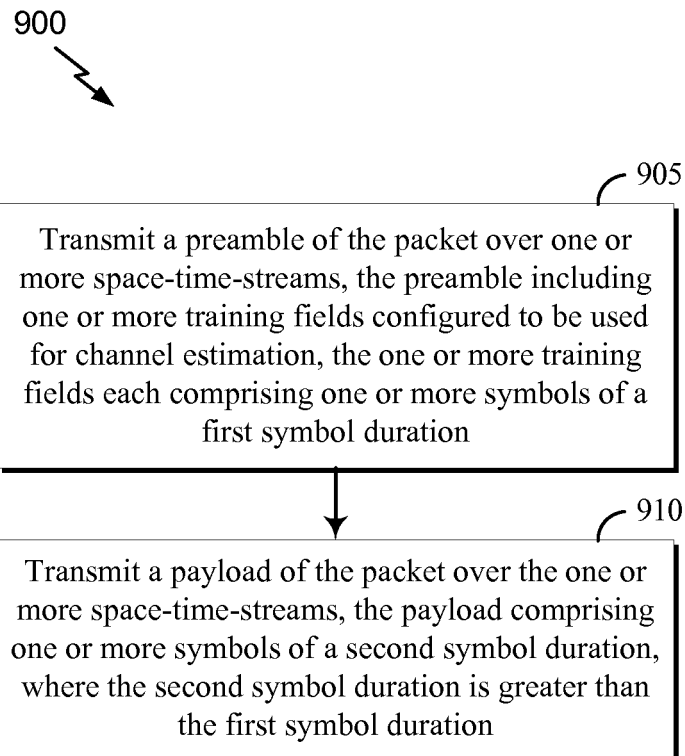


FIG. 9

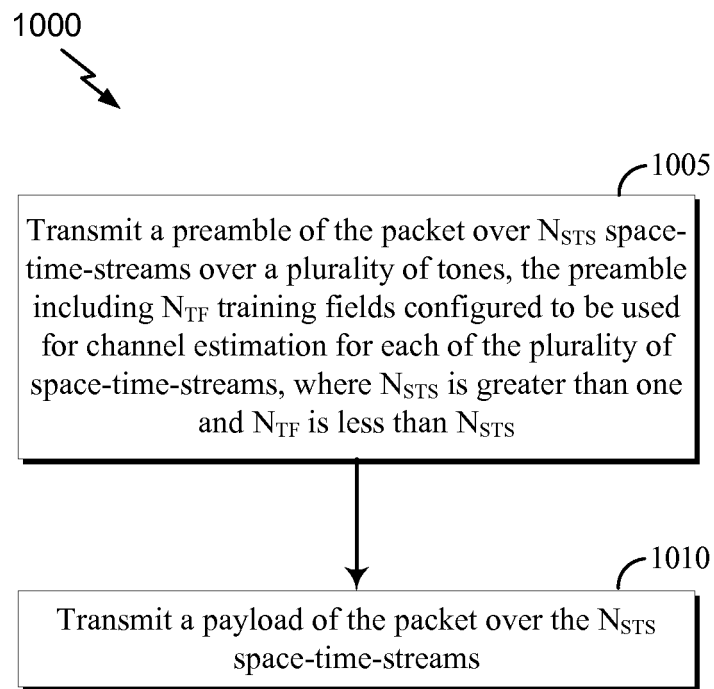


FIG. 10

$$P_{4 \times 4} = \begin{pmatrix} 1 & -1 & 1 & 1 \\ 1 & 1 & -1 & 1 \\ 1 & 1 & 1 & -1 \\ -1 & 1 & 1 & 1 \end{pmatrix}$$

1100A

↓ Spatial stream

1110A

→ Time

FIG. 11A

1100B

1110A

Nss=4, P-matrix				
Tone	LTF1	LTF2	LTF3	LTF4
1	x1+x2+x3-x4	-x1+x2+x3+x4	x1-x2+x3+x4	x1+x2-x3+x4
2	x1+x2+x3-x4	-x1+x2+x3+x4	x1-x2+x3+x4	x1+x2-x3+x4
3	x1+x2+x3-x4	-x1+x2+x3+x4	x1-x2+x3+x4	x1+x2-x3+x4
4	x1+x2+x3-x4	-x1+x2+x3+x4	x1-x2+x3+x4	x1+x2-x3+x4
5	x1+x2+x3-x4	-x1+x2+x3+x4	x1-x2+x3+x4	x1+x2-x3+x4
6	x1+x2+x3-x4	-x1+x2+x3+x4	x1-x2+x3+x4	x1+x2-x3+x4
7	x1+x2+x3-x4	-x1+x2+x3+x4	x1-x2+x3+x4	x1+x2-x3+x4
8	x1+x2+x3-x4	-x1+x2+x3+x4	x1-x2+x3+x4	x1+x2-x3+x4

FIG. 11B

1200A

$$P_{2 \times 2} = \begin{pmatrix} 1 & -1 \\ 1 & 1 \end{pmatrix} \begin{matrix} \downarrow \text{Spatial stream} \\ \rightarrow \text{Time} \end{matrix}$$

FIG. 12A

1200B

$$P_{4 \times 2}(\text{odd tone}) = \begin{pmatrix} 1 & -1 \\ 1 & 1 \\ 0 & 0 \\ 0 & 0 \end{pmatrix}, \quad P_{4 \times 2}(\text{even tone}) = \begin{pmatrix} 0 & 0 \\ 0 & 0 \\ 1 & -1 \\ 1 & 1 \end{pmatrix}$$

1205B

1210A

1210B

FIG. 12B

1200C

Nss=4, P-matrix with Ng=2		
Tone	LTF1	LTF2
1	x1+x2	-x1+x2
2	x3+x4	-x3+x4
3	x1+x2	-x1+x2
4	x3+x4	-x3+x4
5	x1+x2	-x1+x2
6	x3+x4	-x3+x4
7	x1+x2	-x1+x2
8	x3+x4	-x3+x4

1210A

1210B

FIG. 12C

Nss=4, P-matrix with Ng=4	
Tone	LTF1
1	x1
2	x2
3	x3
4	x4
5	x1
6	x2
7	x3
8	x4

1300A

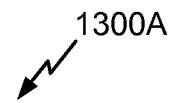


FIG. 13A

Nss=3, P-matrix with Ng=2		
Tone	LTF1	LTF2
1	x1+x2	-x1+x2
2	x1+x3	-x1+x3
3	x2+x3	-x2+x3
4	x1+x2	-x1+x2
5	x1+x3	-x1+x3
6	x2+x3	-x2+x3

1300B

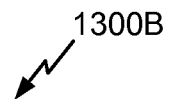


FIG. 13B

Nss=3, P-matrix with Ng=2		
Tone	LTF1	LTF2
1	x1+x2	-x1+x2
2	x3	x3
3	x1+x2	-x1+x2
4	x3	x3
5	x1+x2	-x1+x2
6	x3	x3

1300C

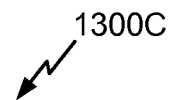


FIG. 13C

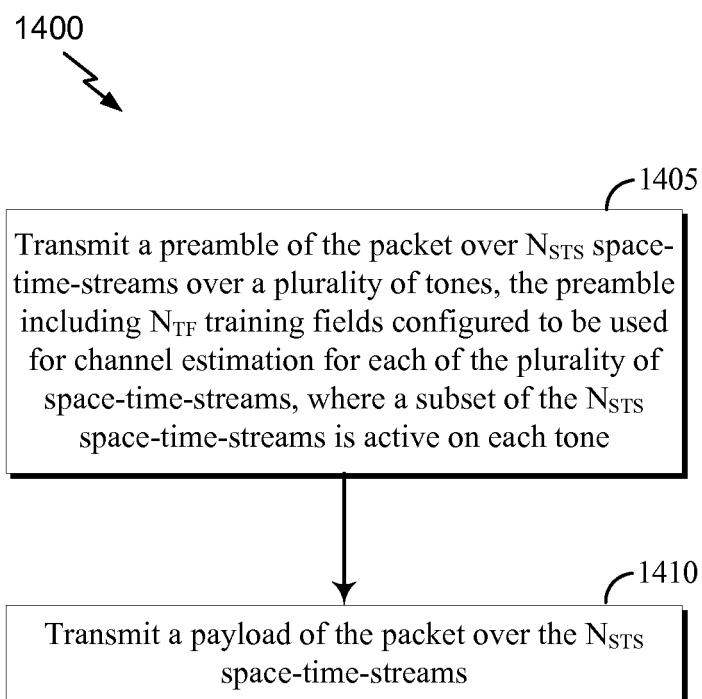


FIG. 14