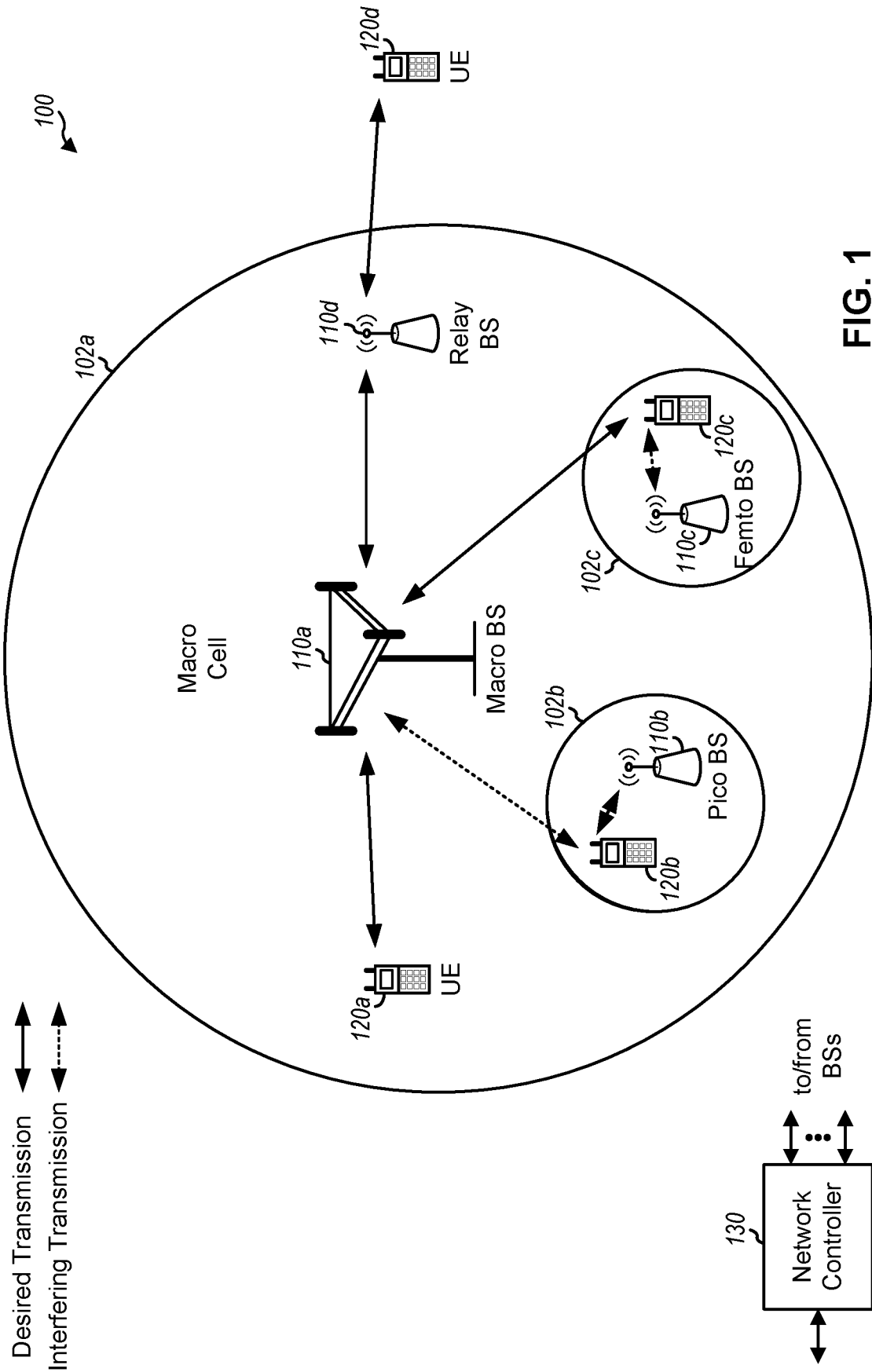




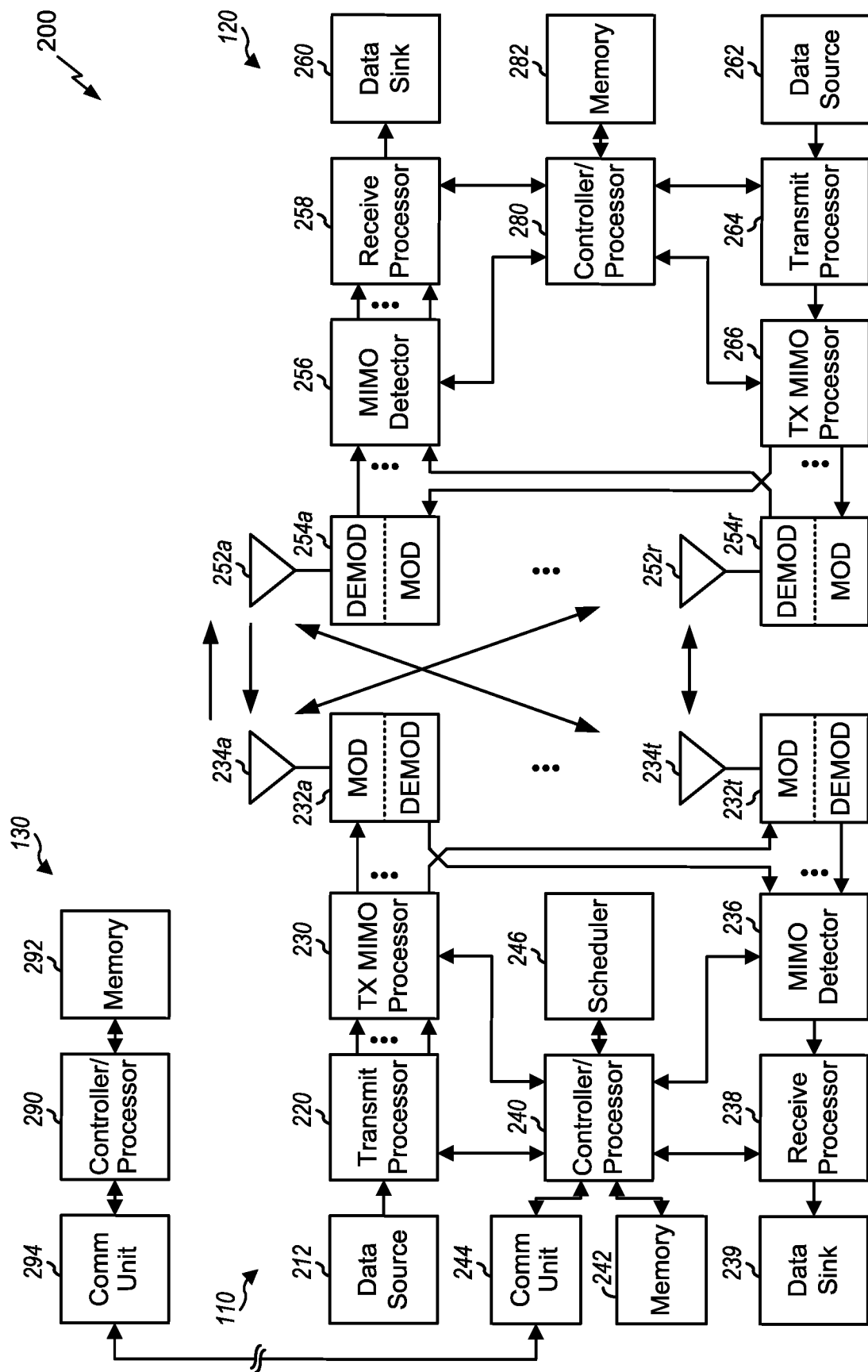
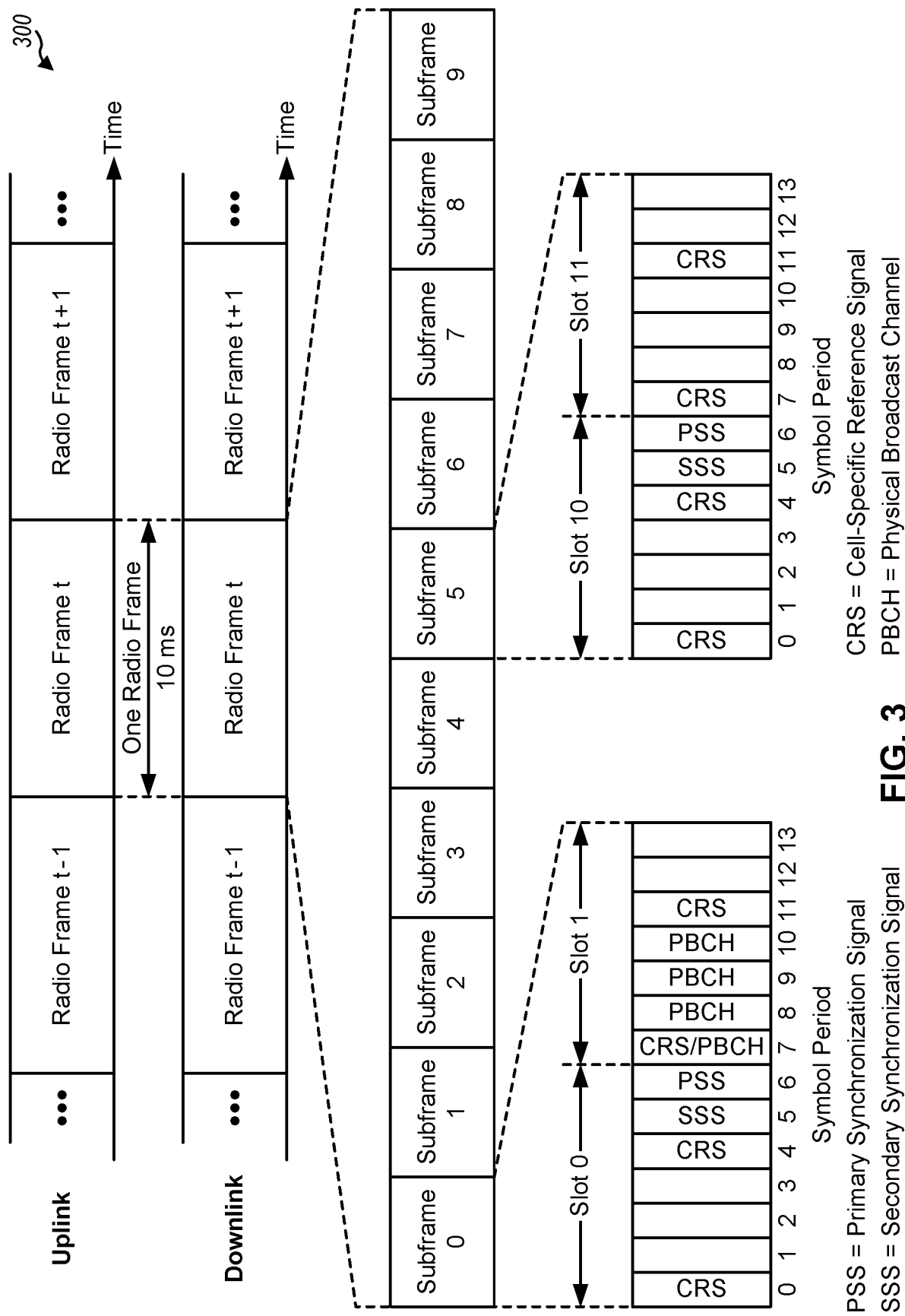


FIG. 2



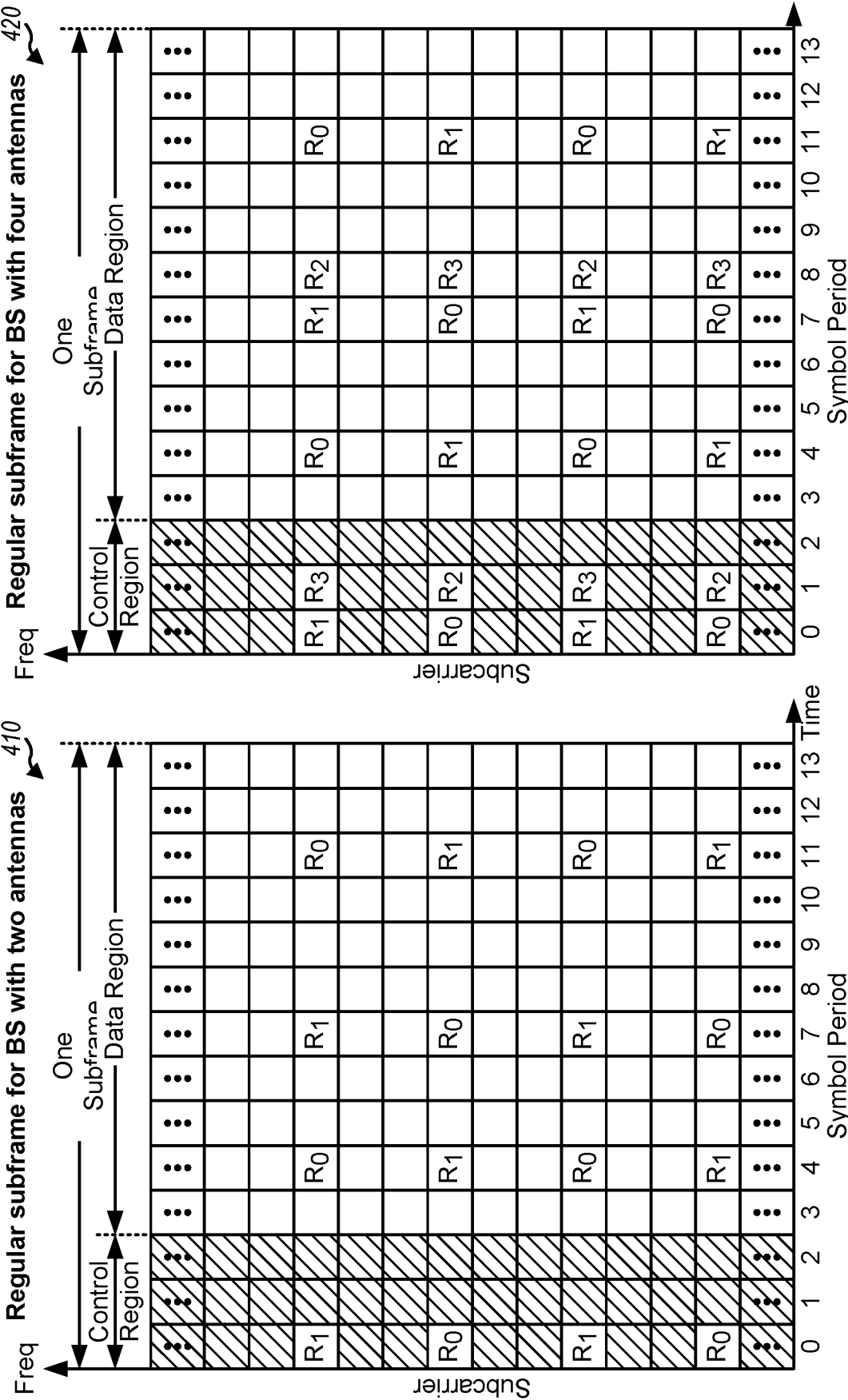


FIG. 4

Ra Reference symbol for antenna a

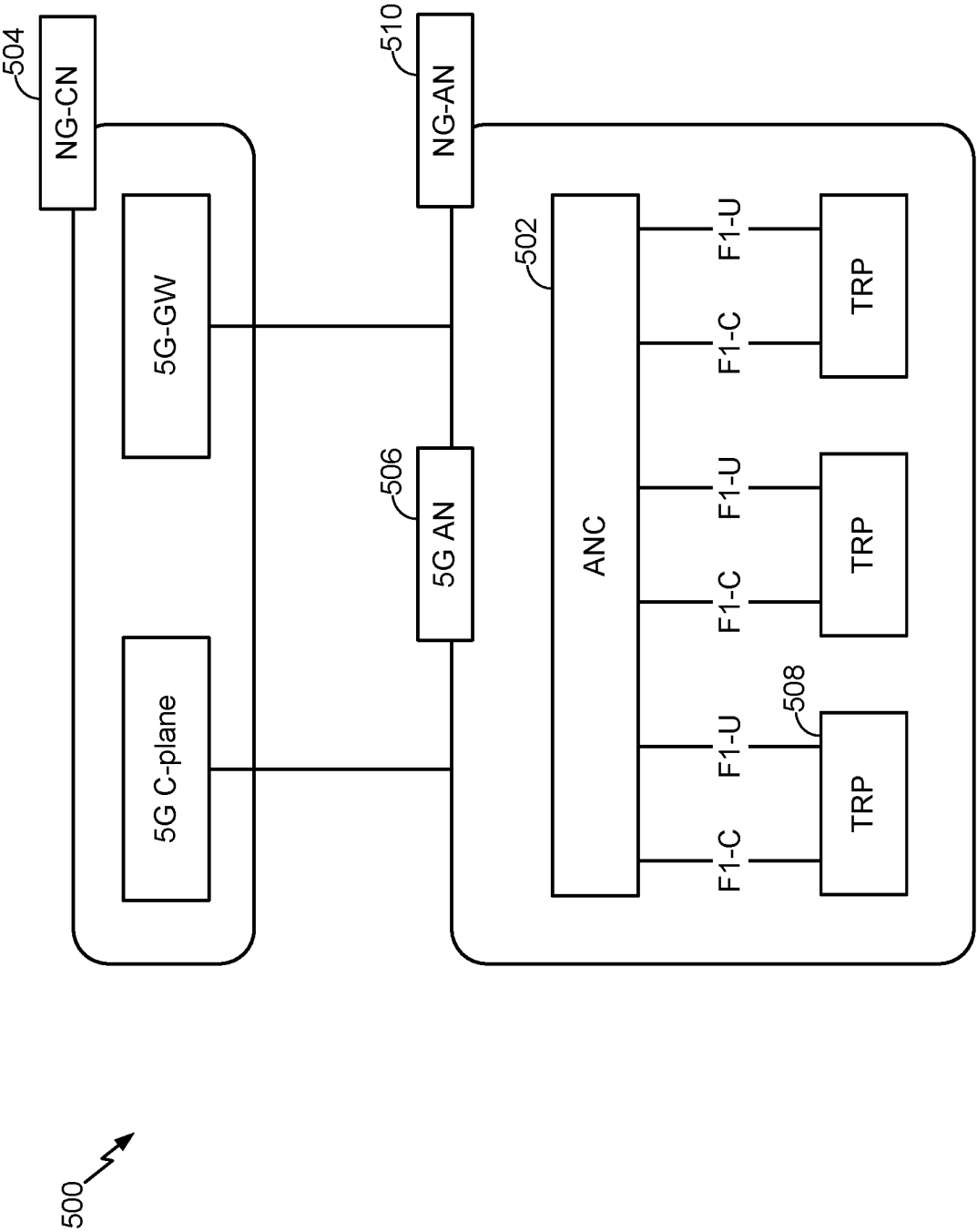
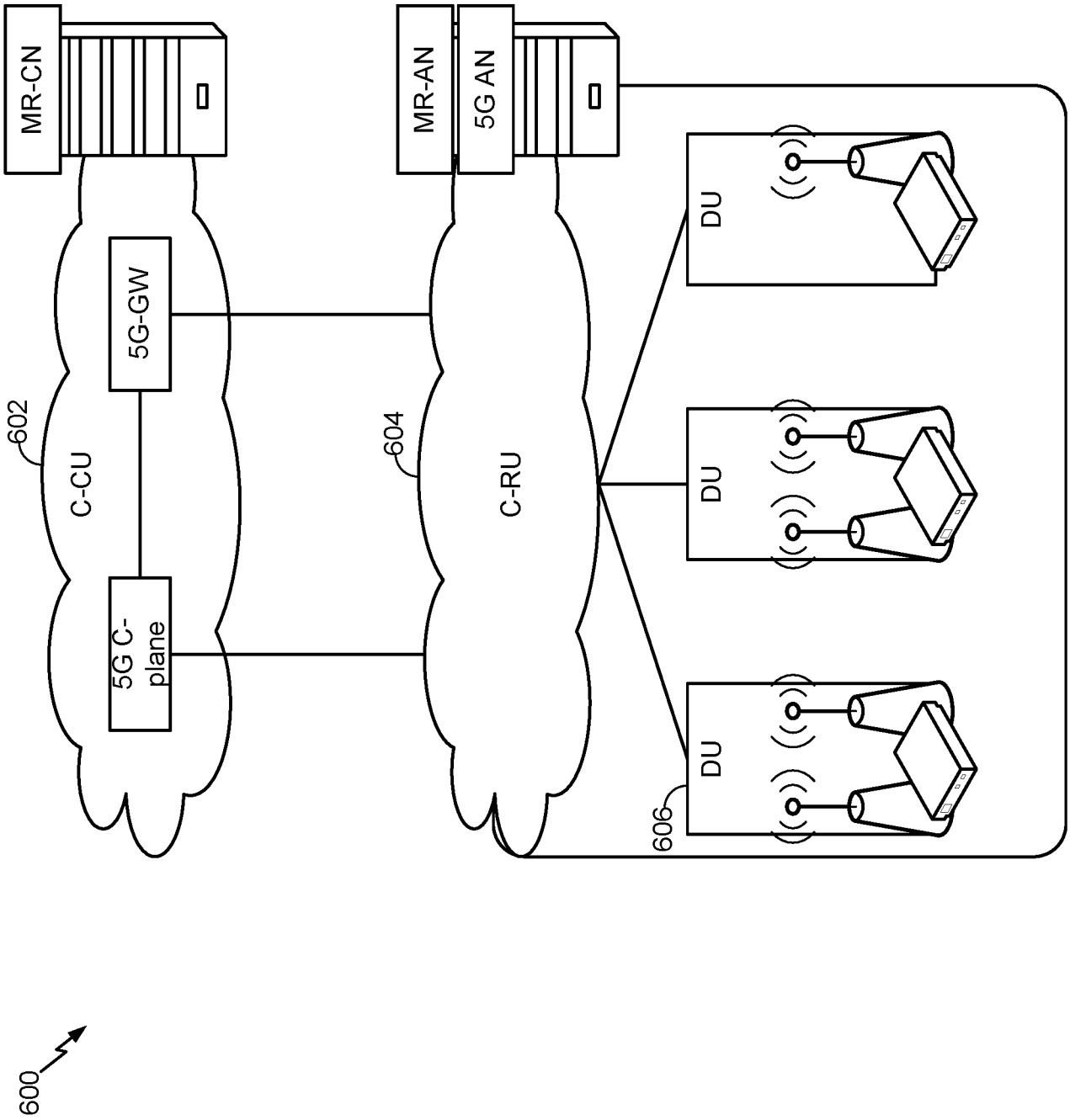


FIG. 5

FIG. 6



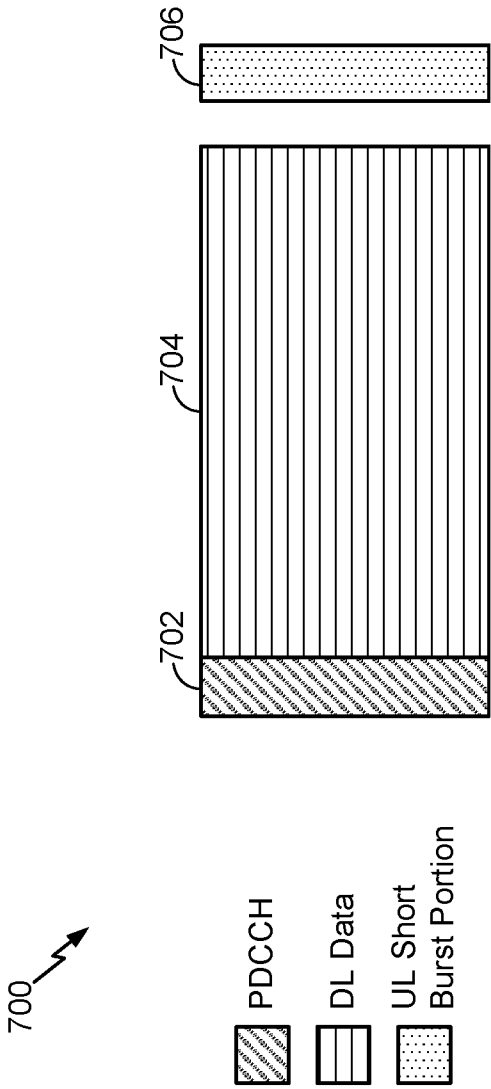


FIG. 7

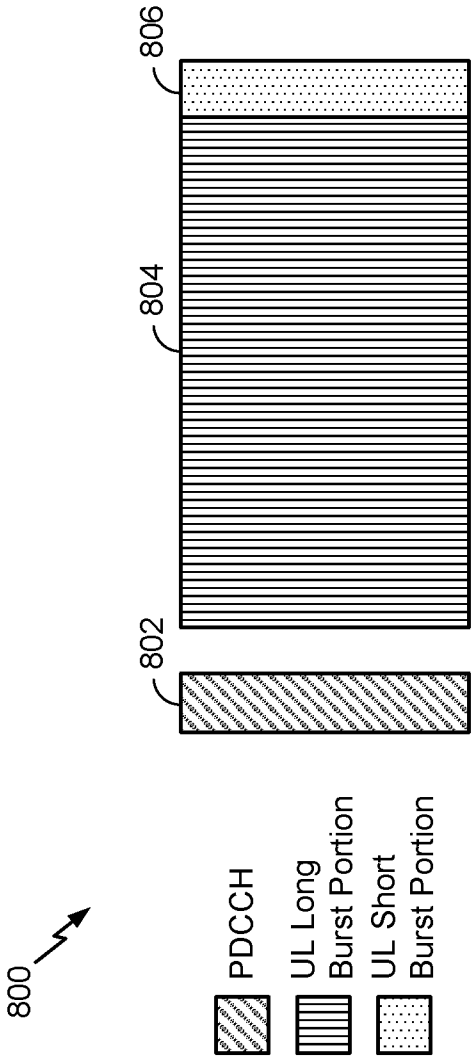


FIG. 8

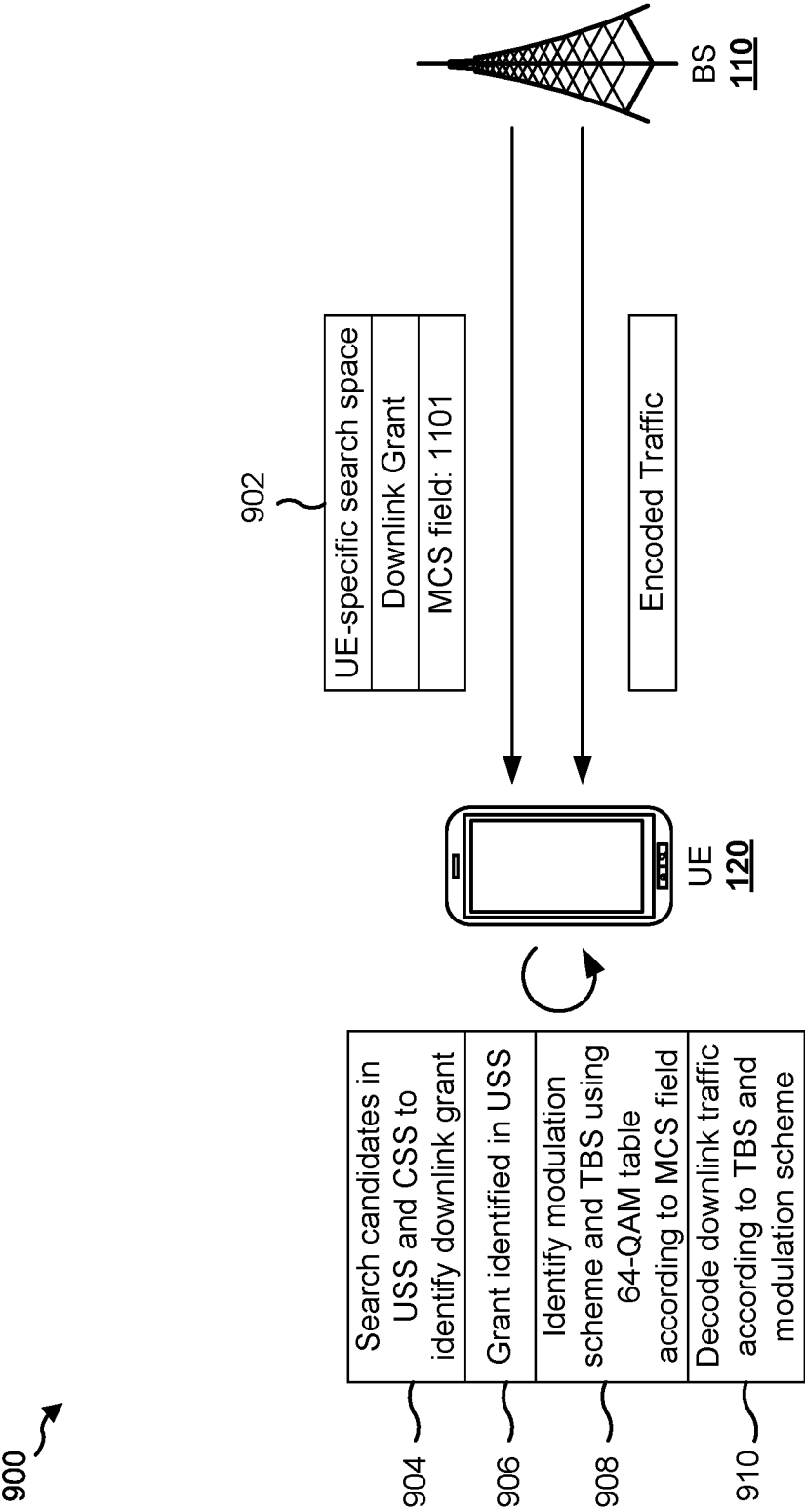


FIG. 9A

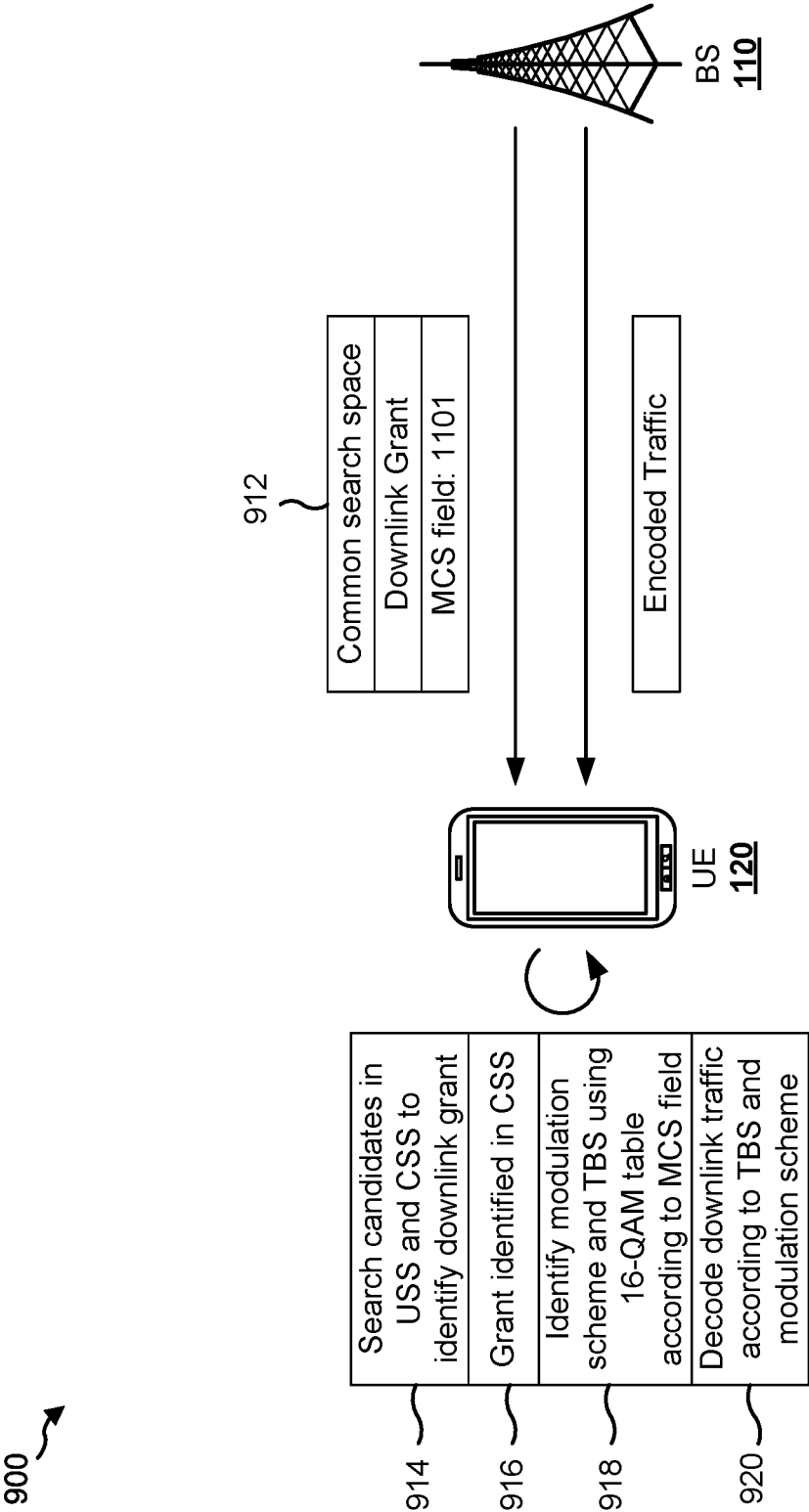


FIG. 9B

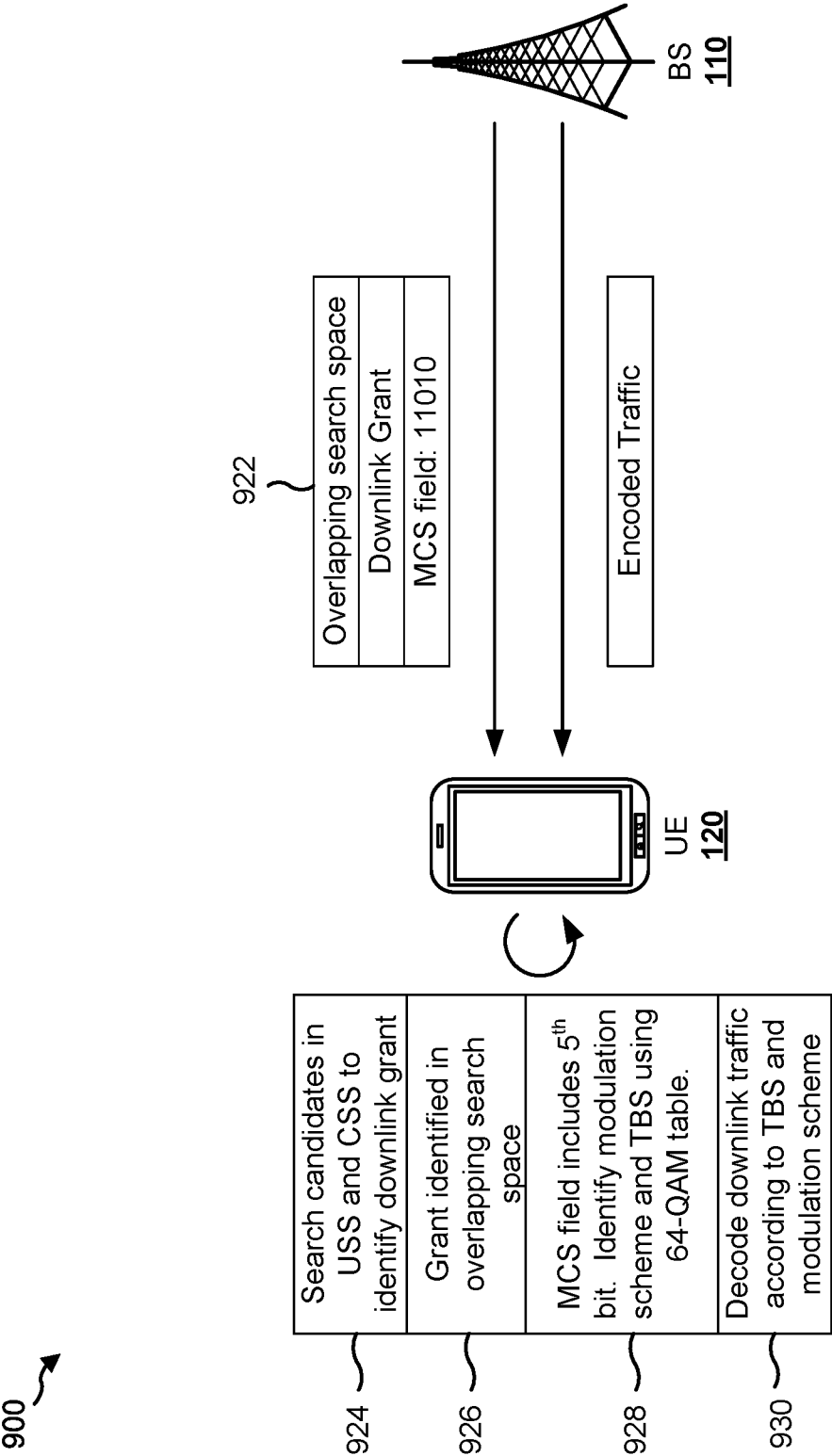


FIG. 9C

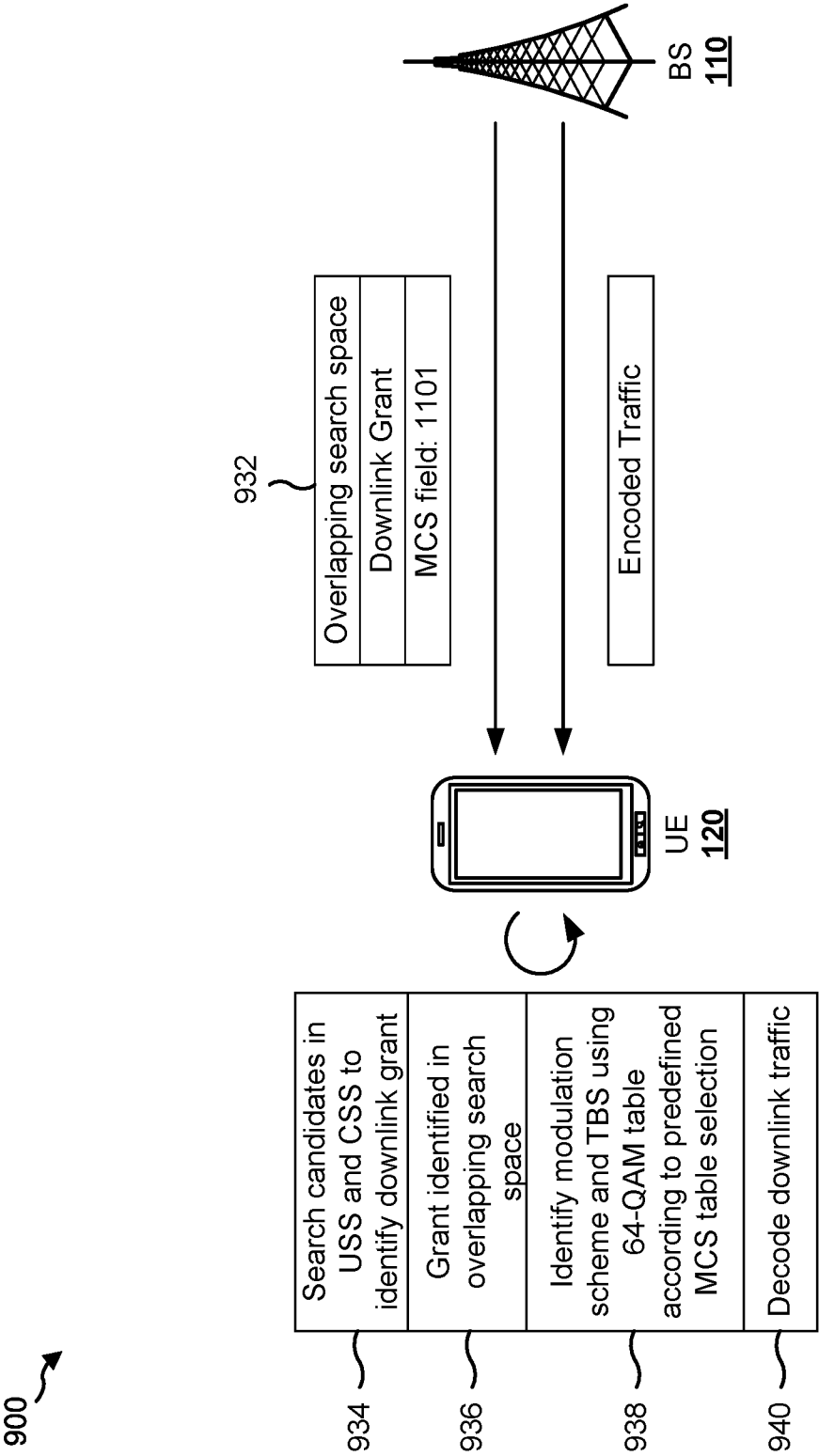
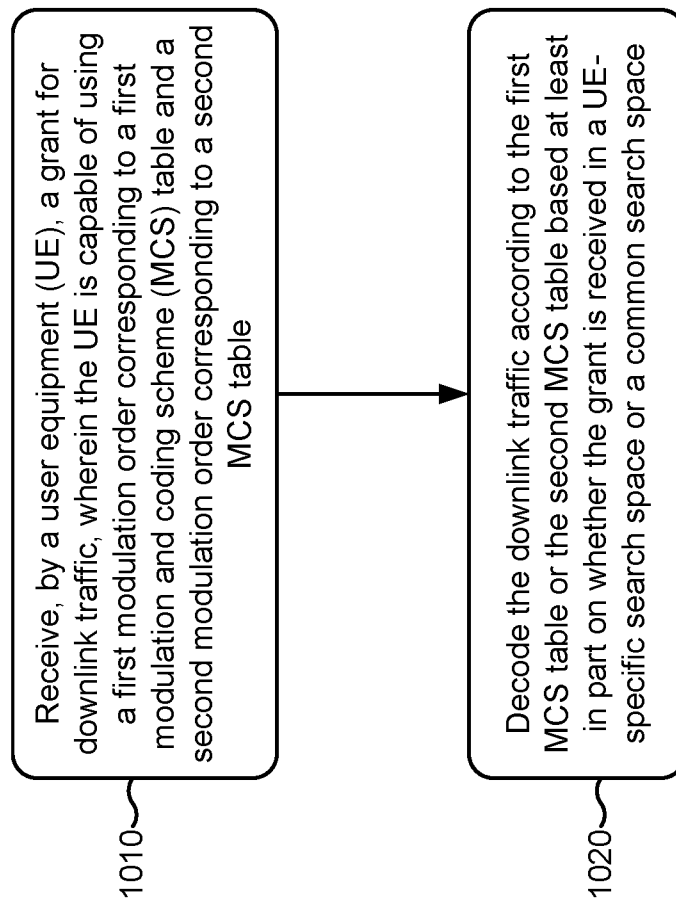


FIG. 9D

1000 ↗

**FIG. 10**

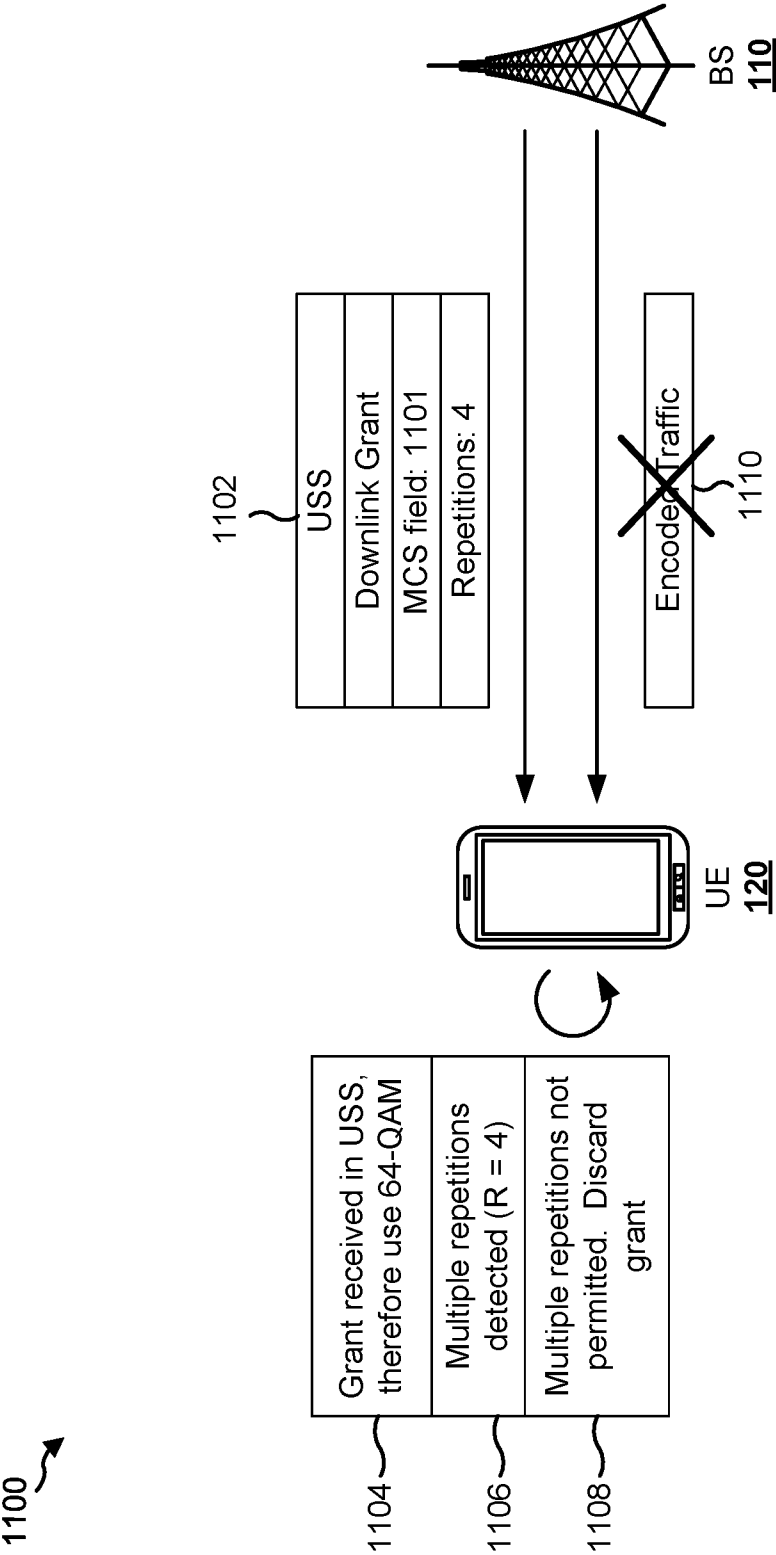


FIG. 11A

1100 ↗

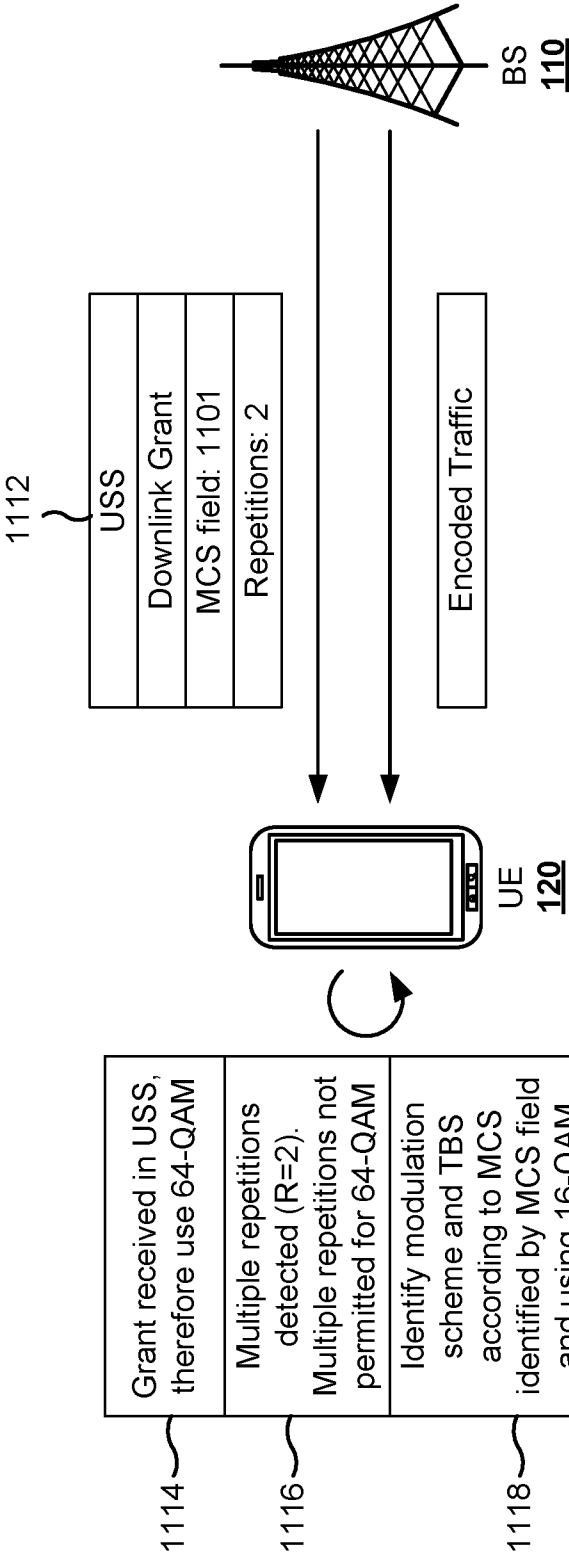


FIG. 11B

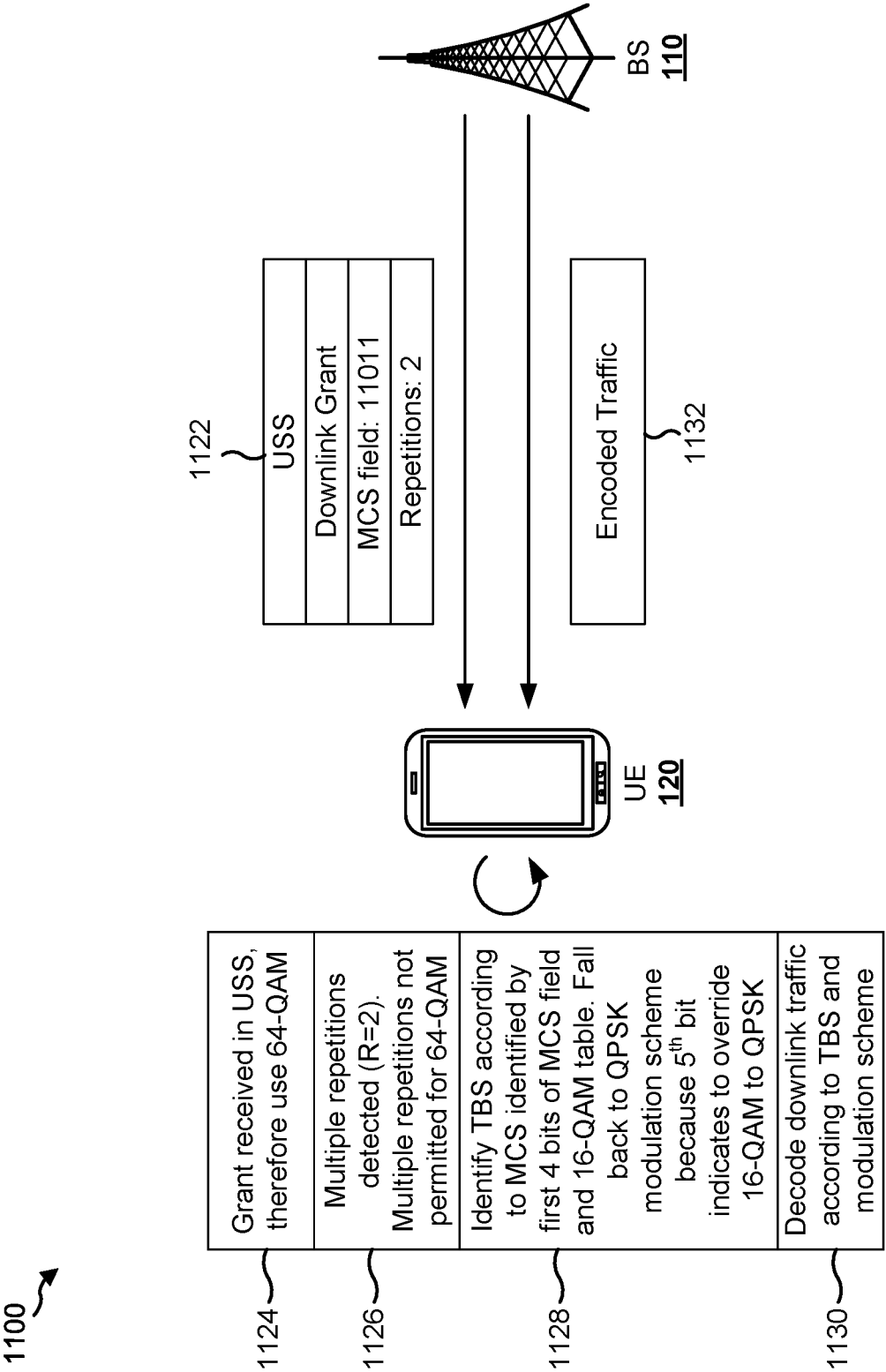


FIG. 11C

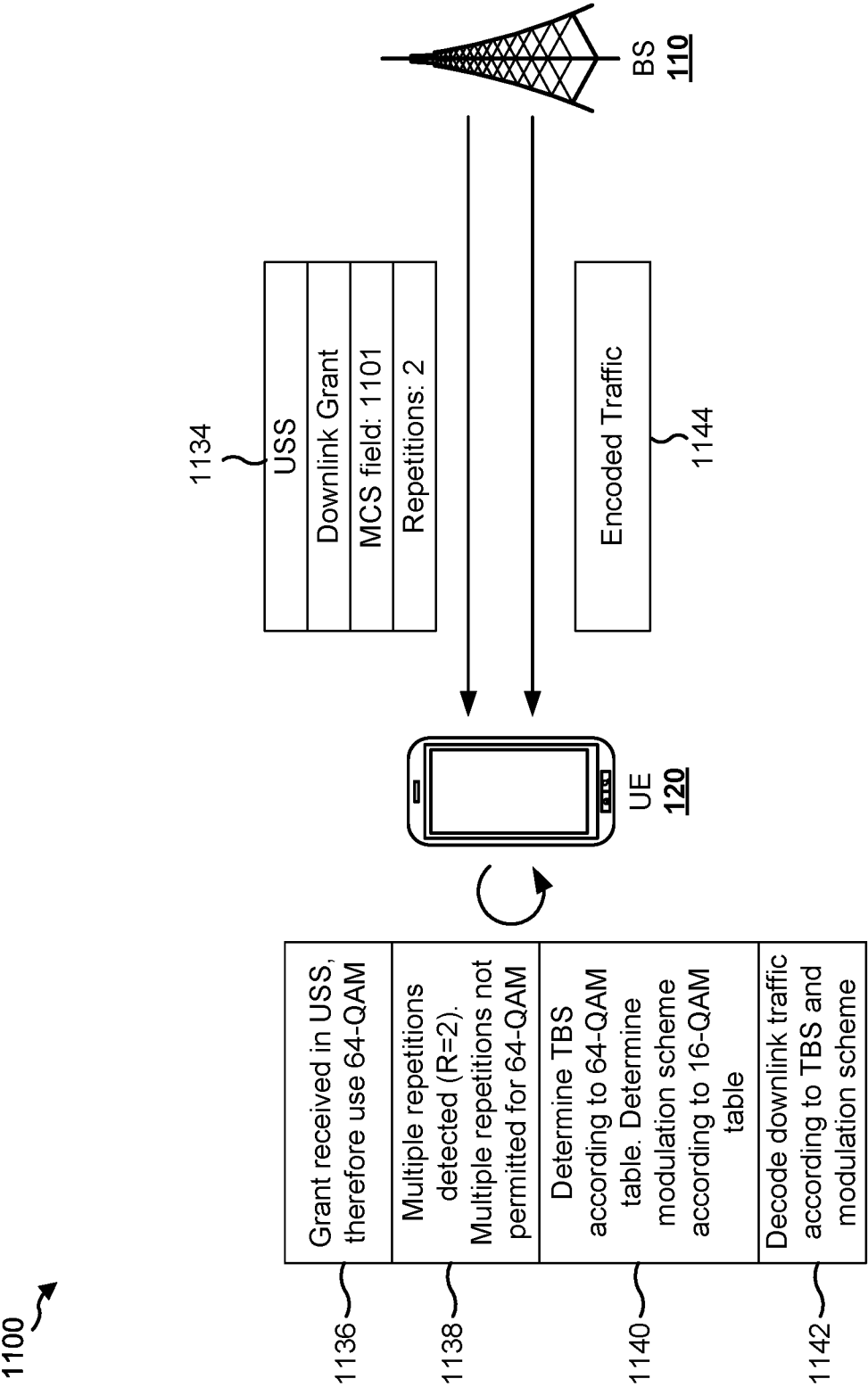
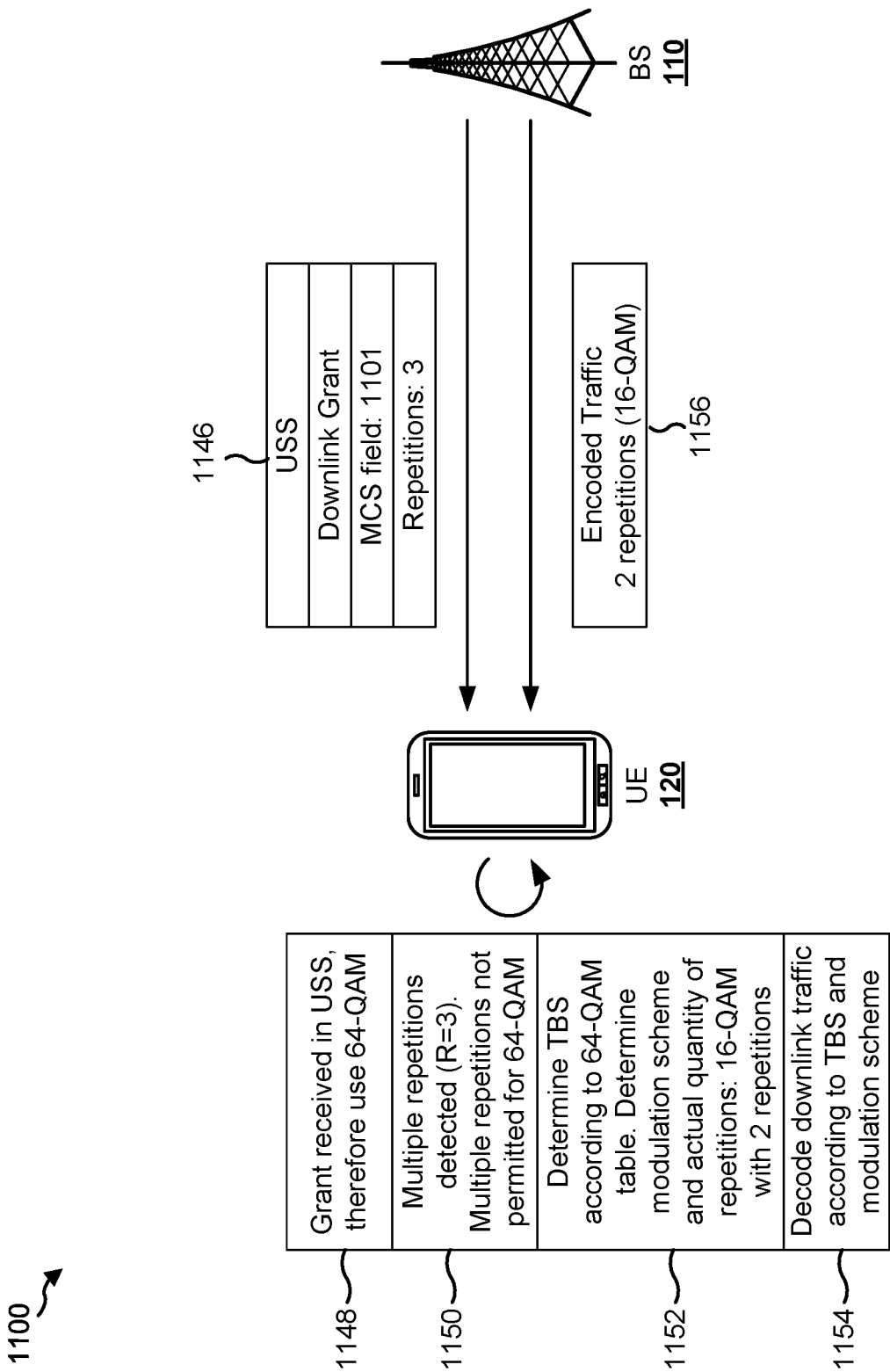
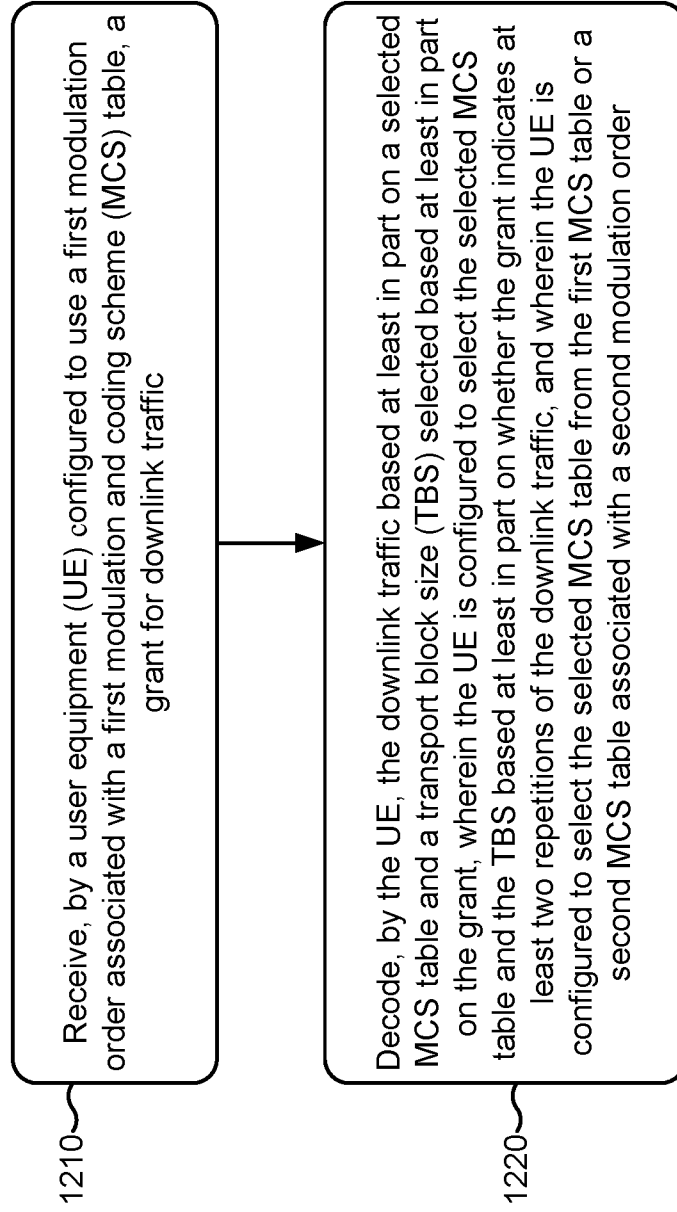


FIG. 11D



1200 **FIG. 12**

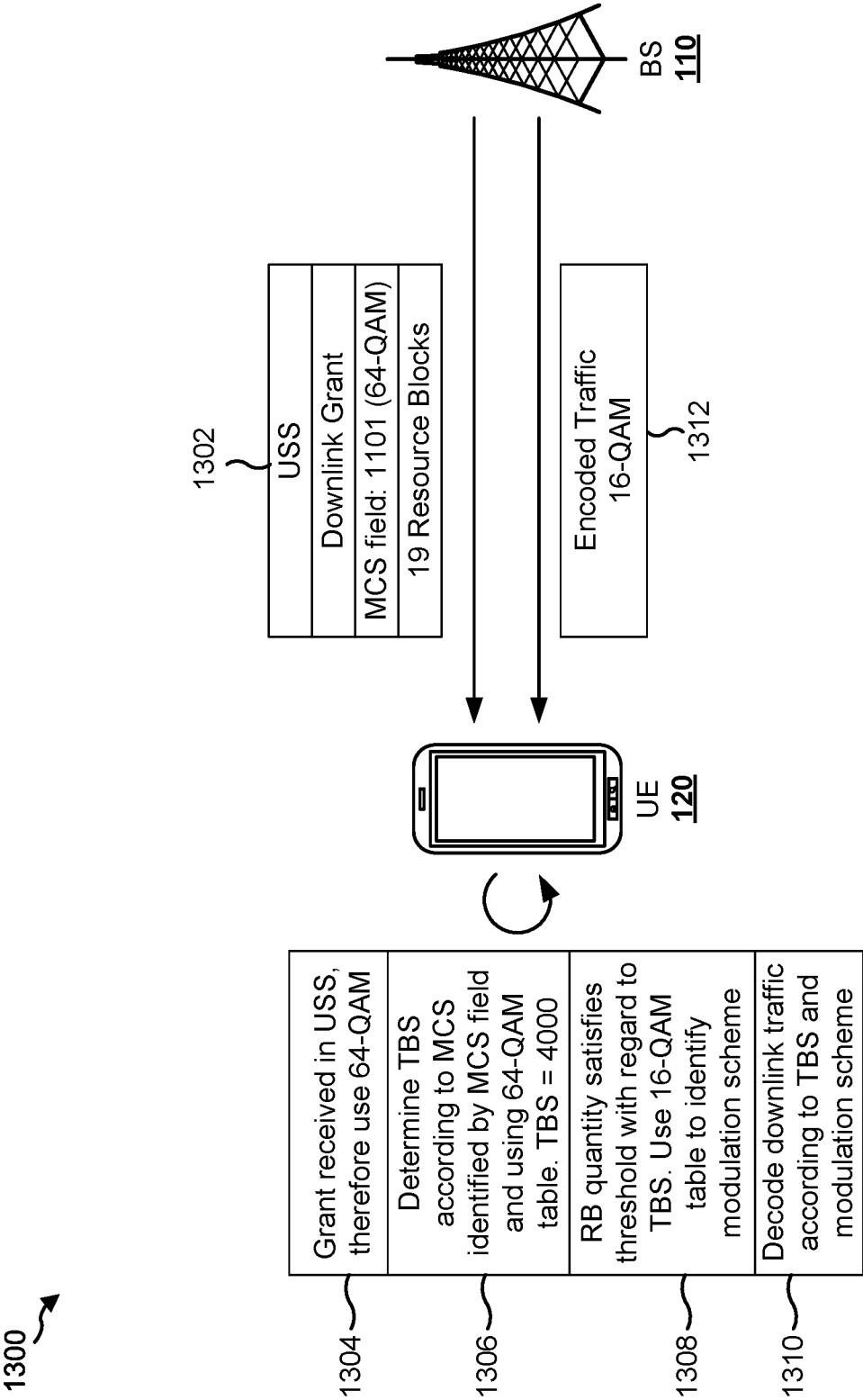


FIG. 13

1400 ↗

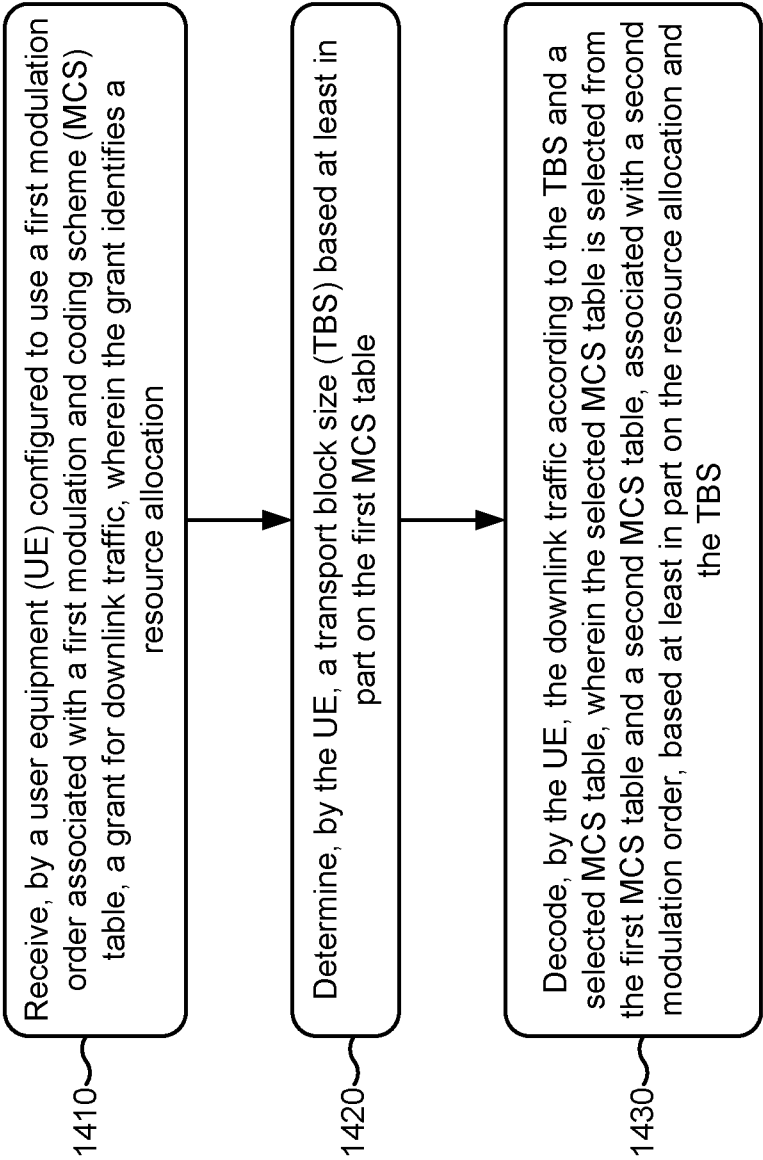


FIG. 14

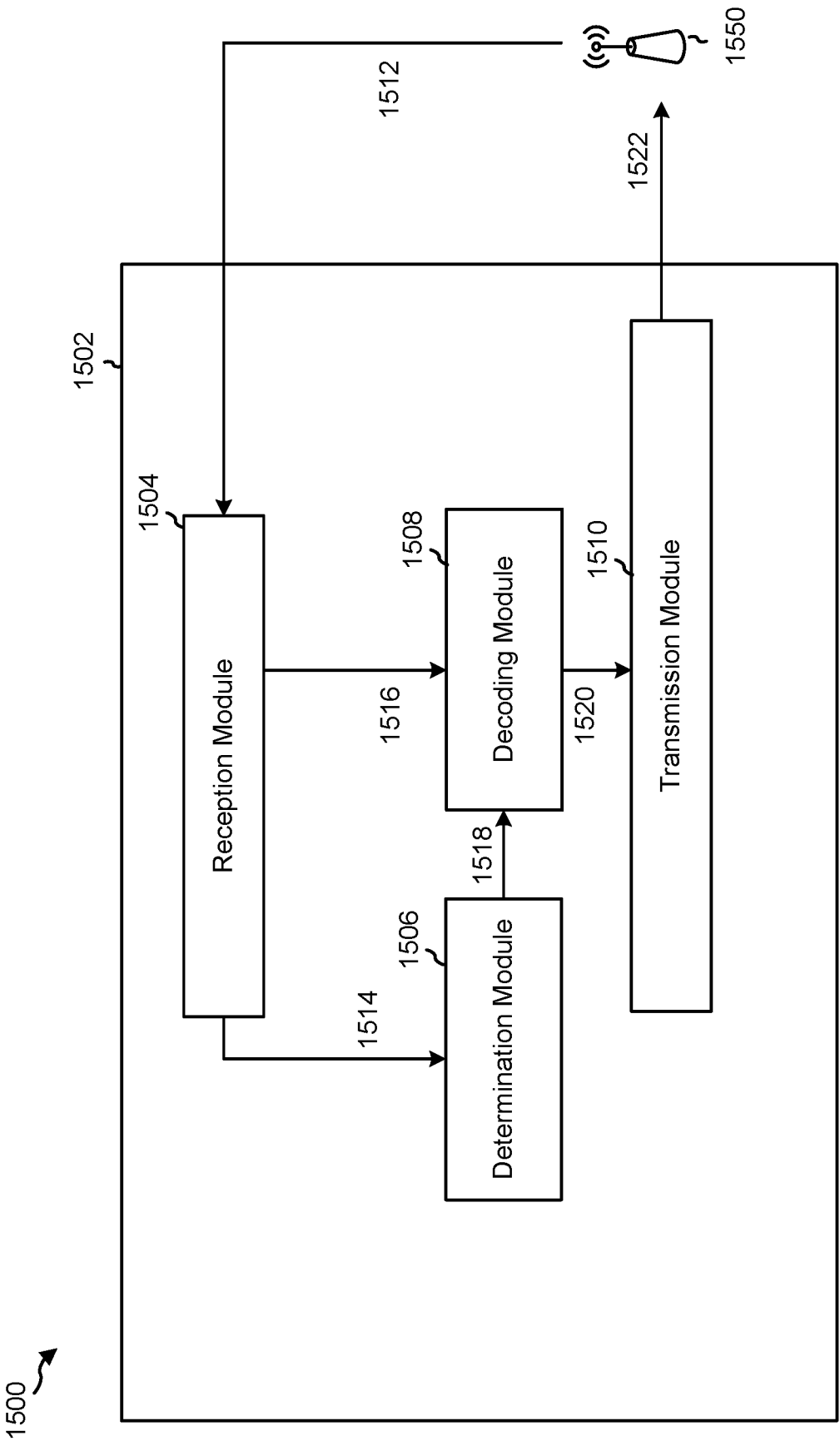


FIG. 15

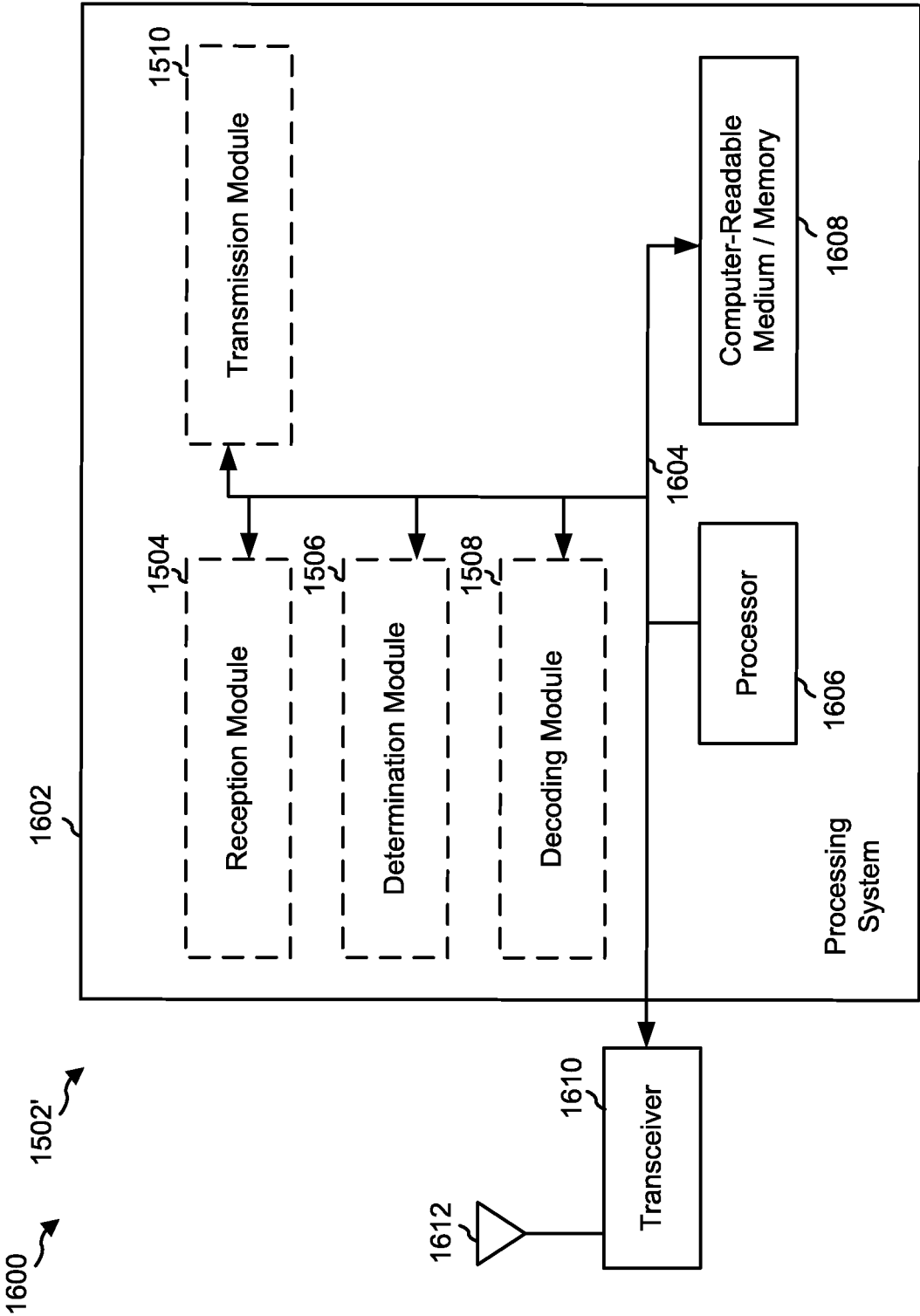


FIG. 16

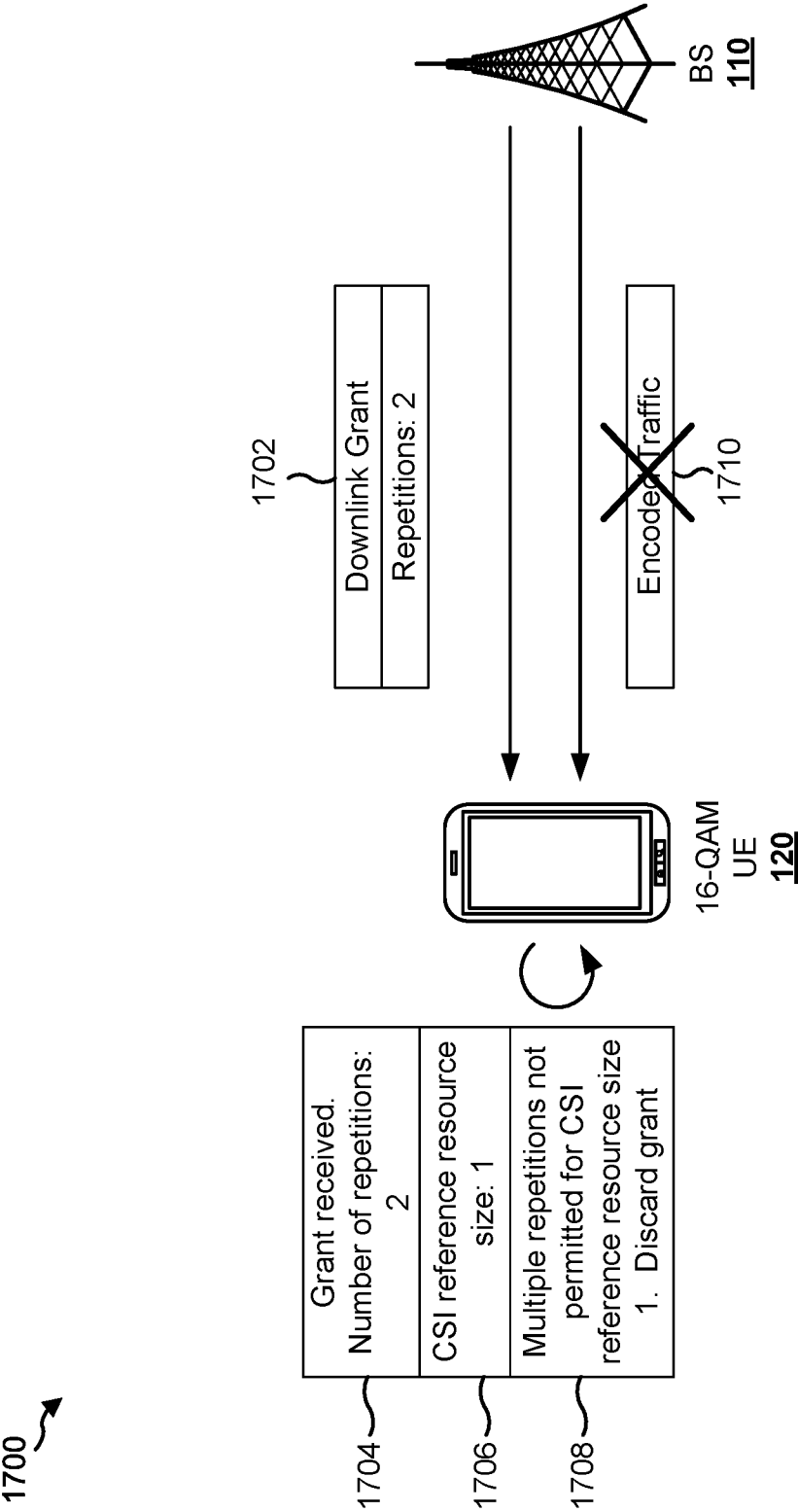


FIG. 17A

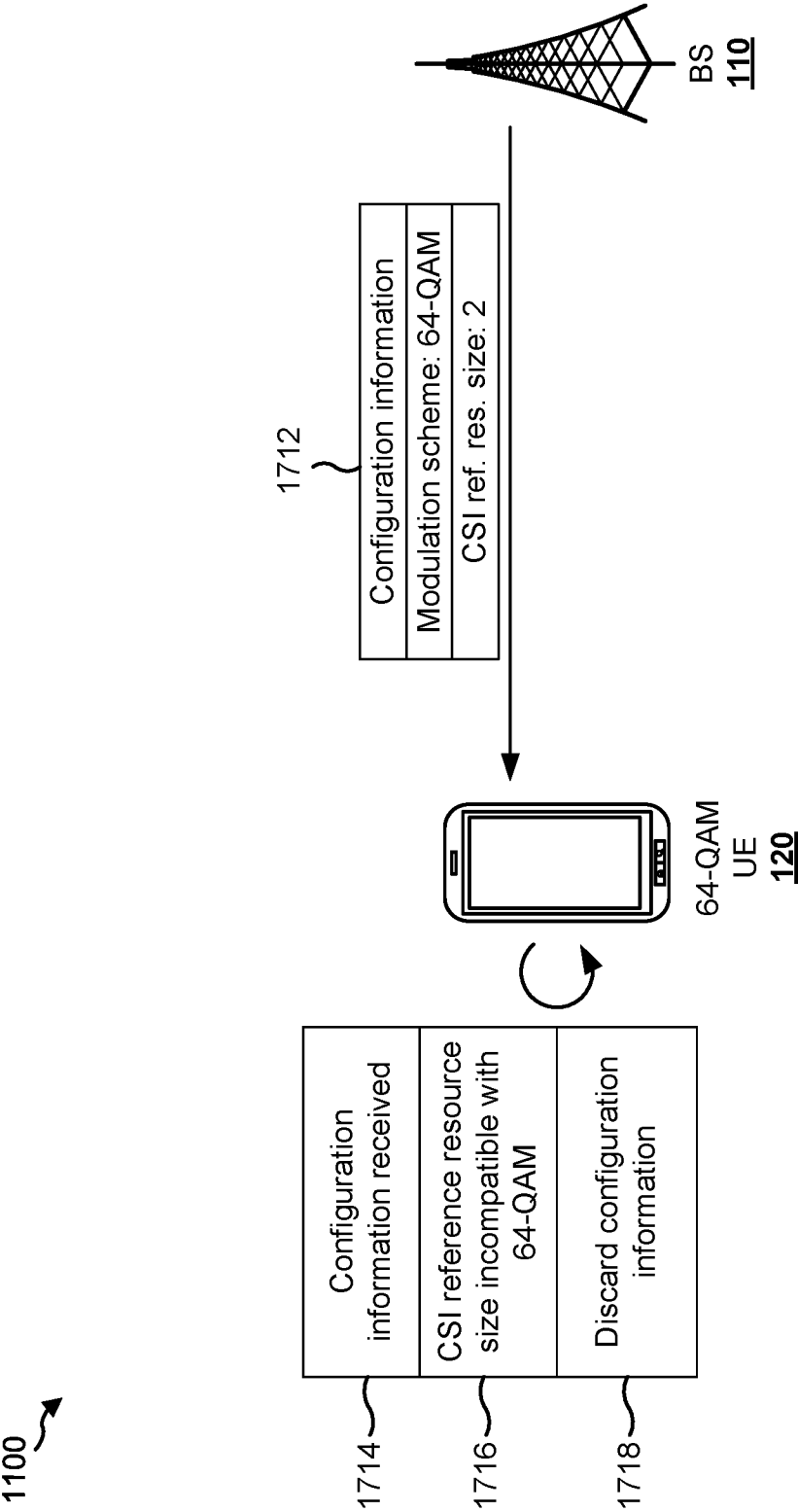


FIG. 17B

1800 ↗

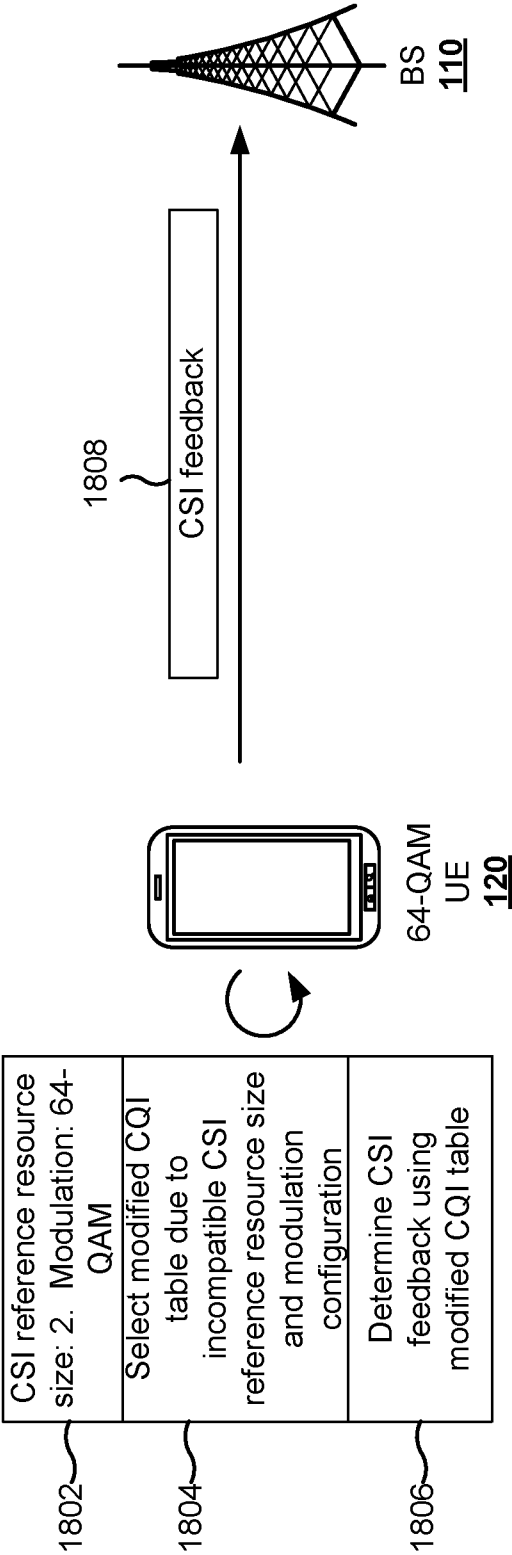


FIG. 18A

1800 ↗

1810
CSI Ref. Res. Size = 1

CQI index	modulation	code rate x 1024 x R_CSIMax	efficiency x R_CSIMax
0		out of range	
1	QPSK	40	0.0781
2	QPSK	78	0.1523
3	QPSK	120	0.2344
4	QPSK	193	0.3770
5	QPSK	308	0.6016
6	QPSK	449	0.8770
7	QPSK	602	1.1758
8	16QAM	378	1.4766
9	16QAM	490	1.9141
10	16QAM	616	2.4063
11	64QAM	466	2.7305
12	64QAM	567	3.3223
13	64QAM	666	3.9023
14	64QAM	772	4.5234
15	64QAM	873	5.1152

1812
CSI Ref. Res. Size greater than 1

CQI index	modulation	code rate x 1024 x R_CSIMax	Assumed R_CSIMax	efficiency x R_CSIMax
0		out of range		
1	QPSK	40	R_CSIMax	0.0781
2	QPSK	78	R_CSIMax	0.1523
3	QPSK	120	R_CSIMax	0.2344
4	QPSK	193	R_CSIMax	0.3770
5	QPSK	308	R_CSIMax	0.6016
6	QPSK	449	R_CSIMax	0.8770
7	QPSK	602	R_CSIMax	1.1758
8	16QAM	378	R_CSIMax	1.4766
9	16QAM	490	R_CSIMax	1.9141
10	16QAM	616	R_CSIMax	2.4063
11	64QAM	466	1	2.7305
12	64QAM	567	1	3.3223
13	64QAM	666	1	3.9023
14	64QAM	772	1	4.5234
15	64QAM	873	1	5.1152

FIG. 18B

1800 ↗

CSI Ref. Res. Size = 1					CSI Ref. Res. Size greater than 1				
CQI index	modulation	code rate x 1024 x R_CSIMax	efficiency x R_CSIMax		CQI index	modulation	code rate x 1024	Assumed R_CSIMax	efficiency x R_CSIMax
0		out of range			0		out of range		
1	QPSK	40	0.0781		1	QPSK	40	R_CSIMax	0.0781
2	QPSK	78	0.1523		2	QPSK	78	R_CSIMax	0.1523
3	QPSK	120	0.2344		3	QPSK	120	R_CSIMax	0.2344
4	QPSK	193	0.3770		4	QPSK	193	R_CSIMax	0.3770
5	QPSK	308	0.6016		5	QPSK	308	R_CSIMax	0.6016
6	QPSK	449	0.8770		6	QPSK	449	R_CSIMax	0.8770
7	QPSK	602	1.1758		7	QPSK	602	R_CSIMax	1.1758
8	16QAM	378	1.4766		8	16QAM	378	R_CSIMax	1.4766
9	16QAM	490	1.9141		9	16QAM	490	R_CSIMax	1.9141
10	16QAM	616	2.4063		10	16QAM	616	R_CSIMax	2.4063
11	64QAM	466	2.7305		11	16QAM	378	R_CSIMax/2	2.7305
12	64QAM	567	3.3223		12	16QAM	490	R_CSIMax/2	3.3223
13	64QAM	666	3.9023		13	16QAM	616	R_CSIMax/2	3.9023
14	64QAM	772	4.5234		14	64QAM	466	1	4.5234
15	64QAM	873	5.1152		15	64QAM	567	1	5.1152

FIG. 18C

1900 ↗

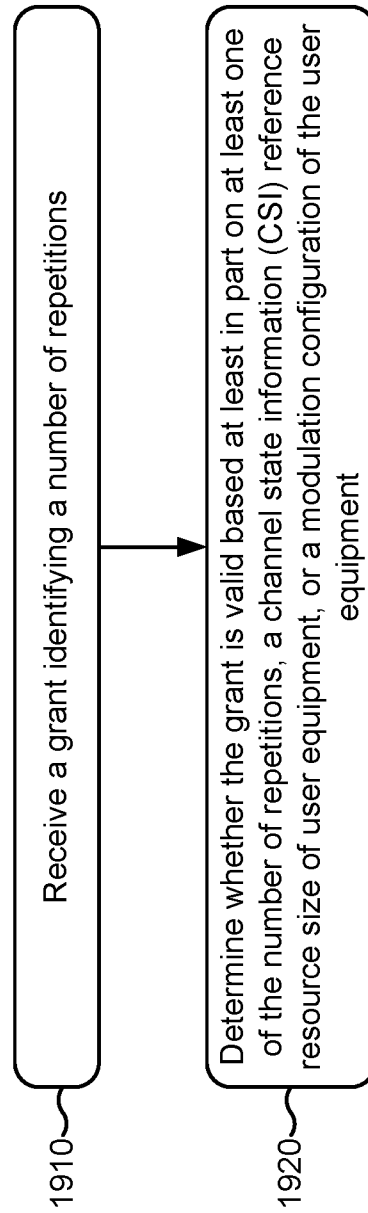


FIG. 19

2000 ↗

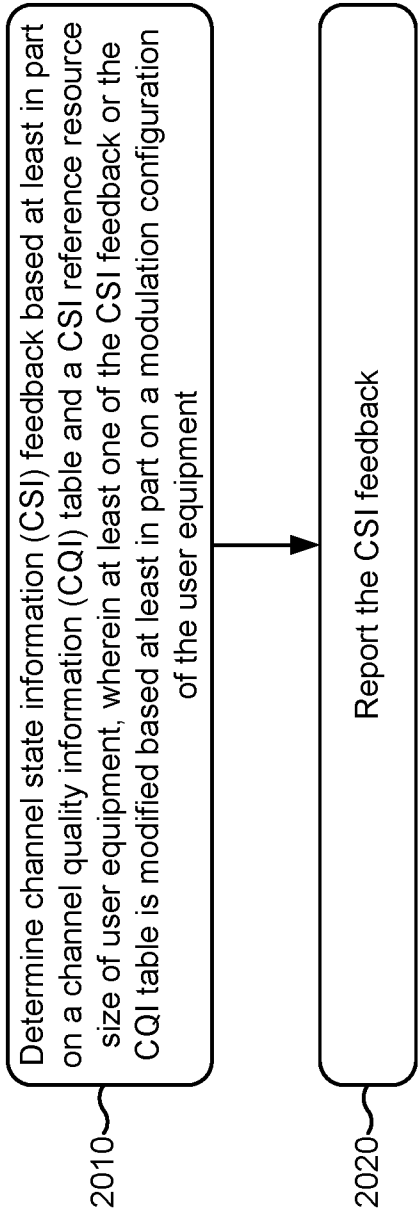


FIG. 20