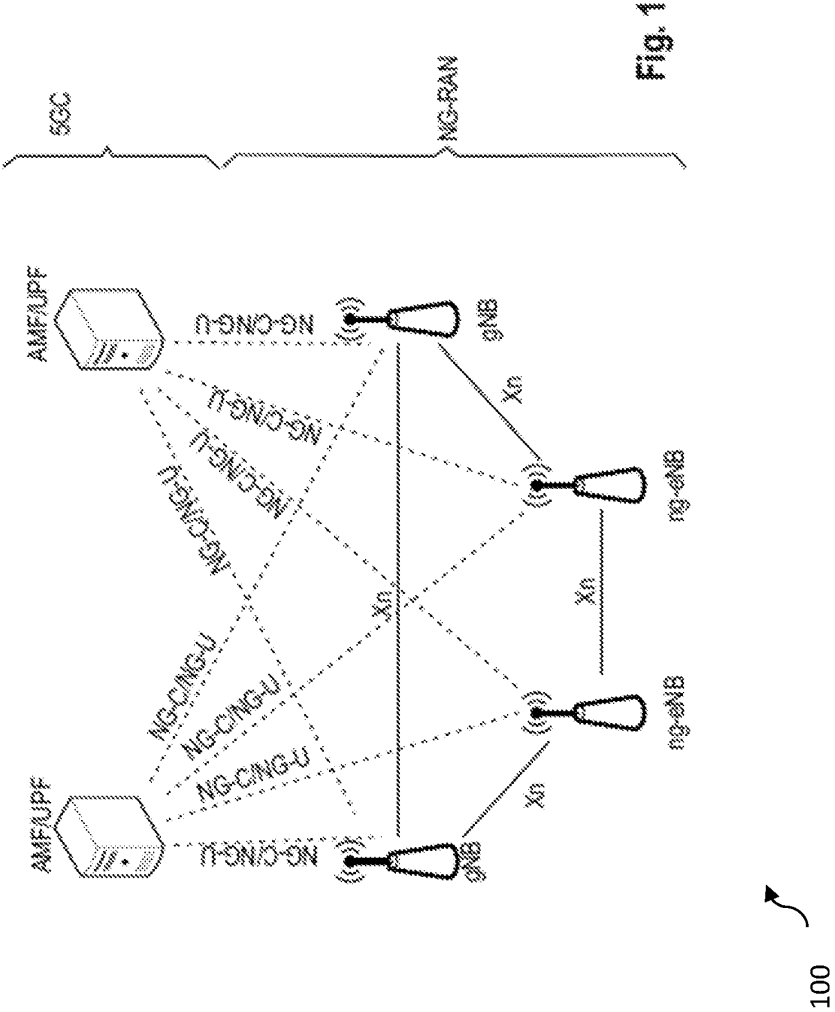




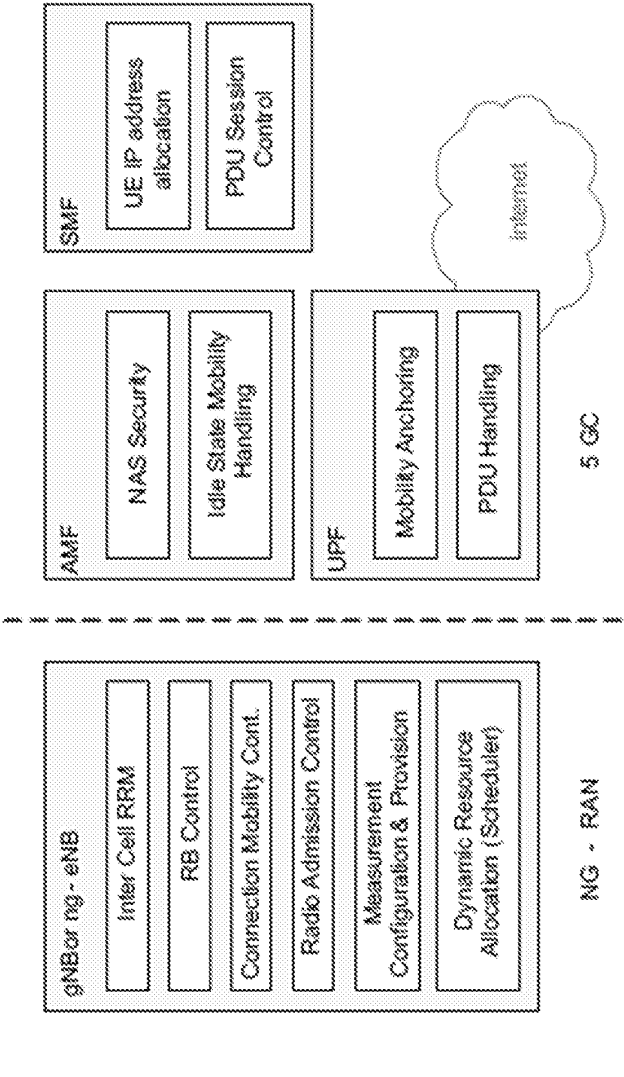


Fig. 2

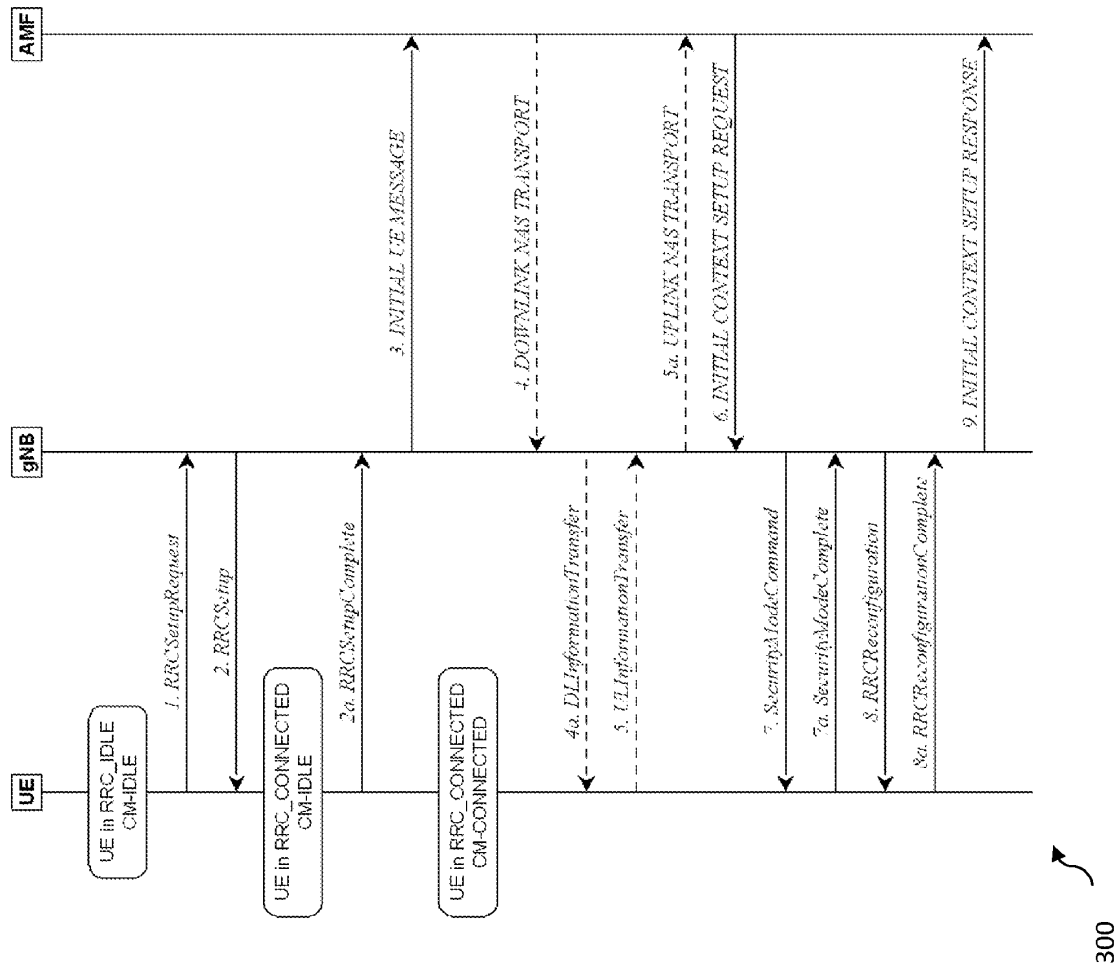


Fig. 3

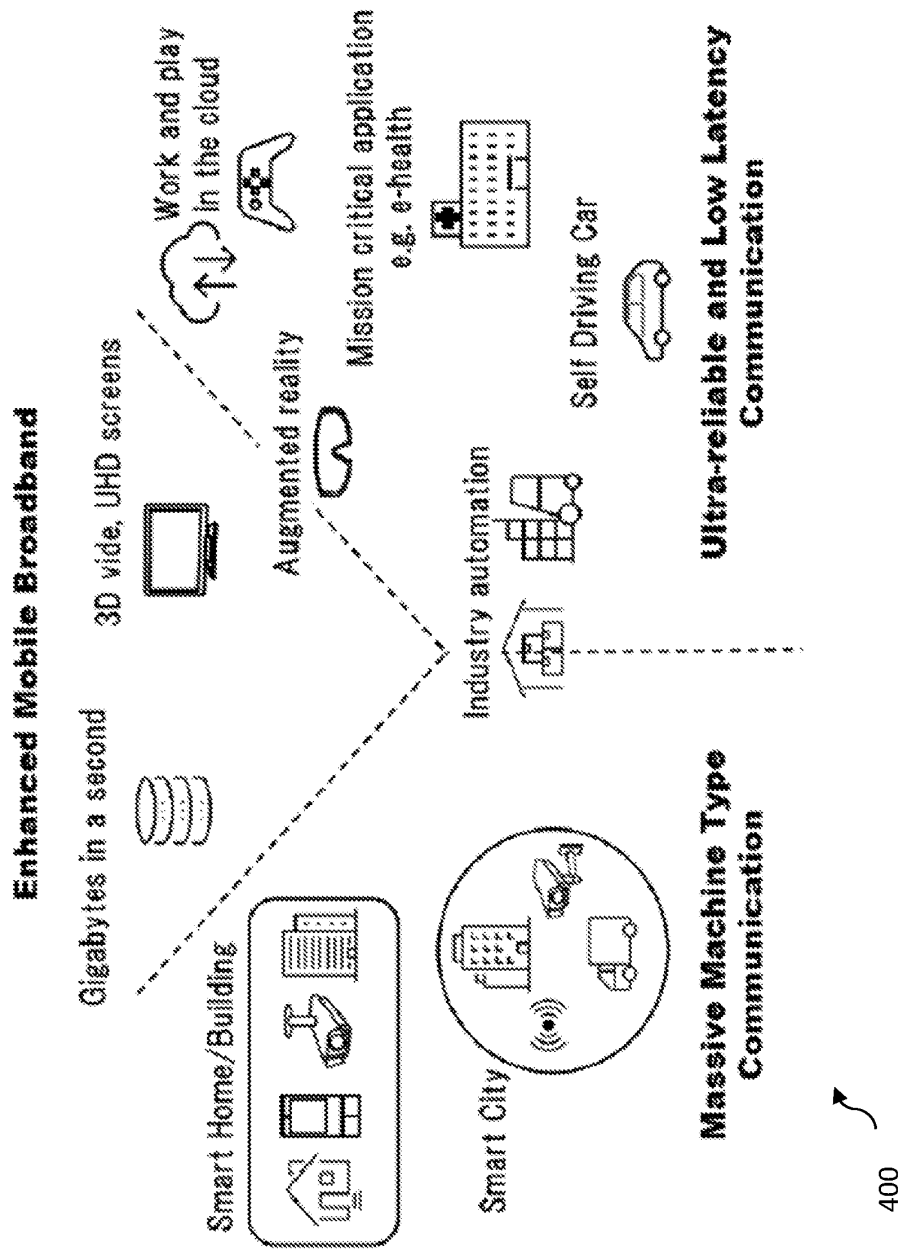


Fig. 4

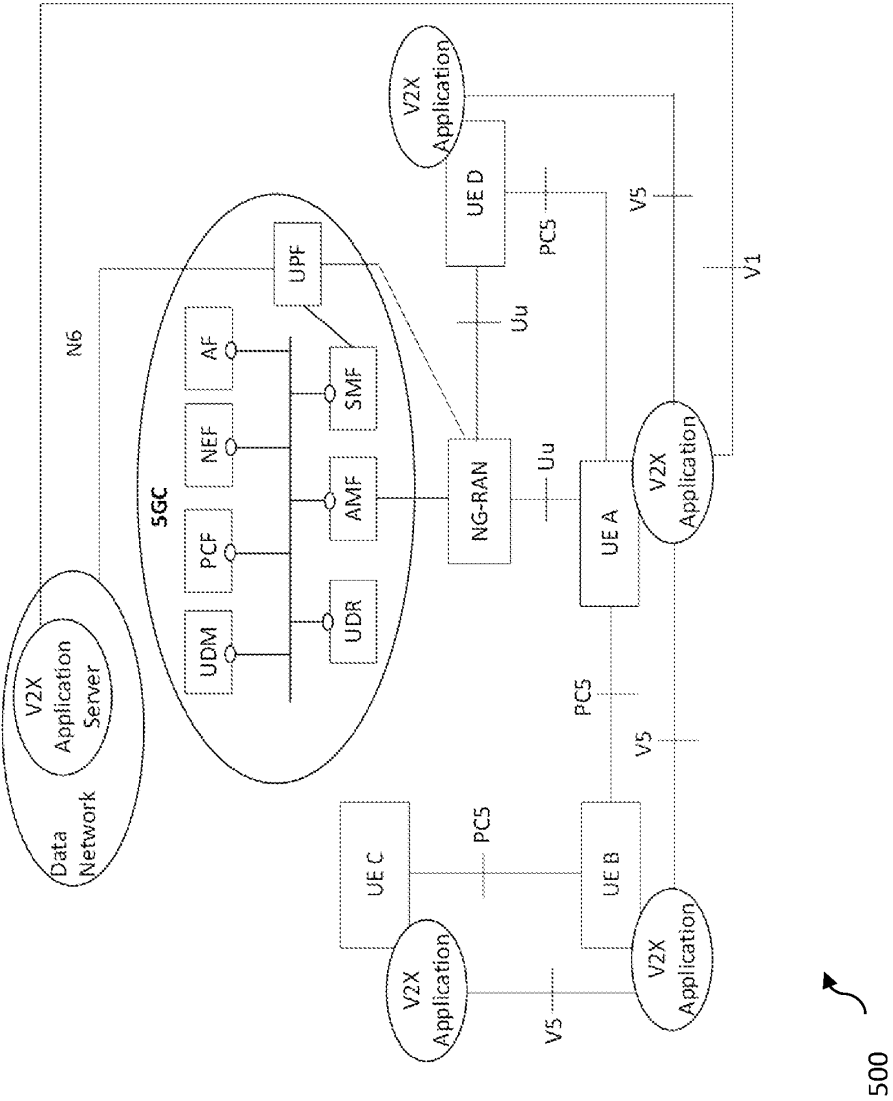


Fig. 5

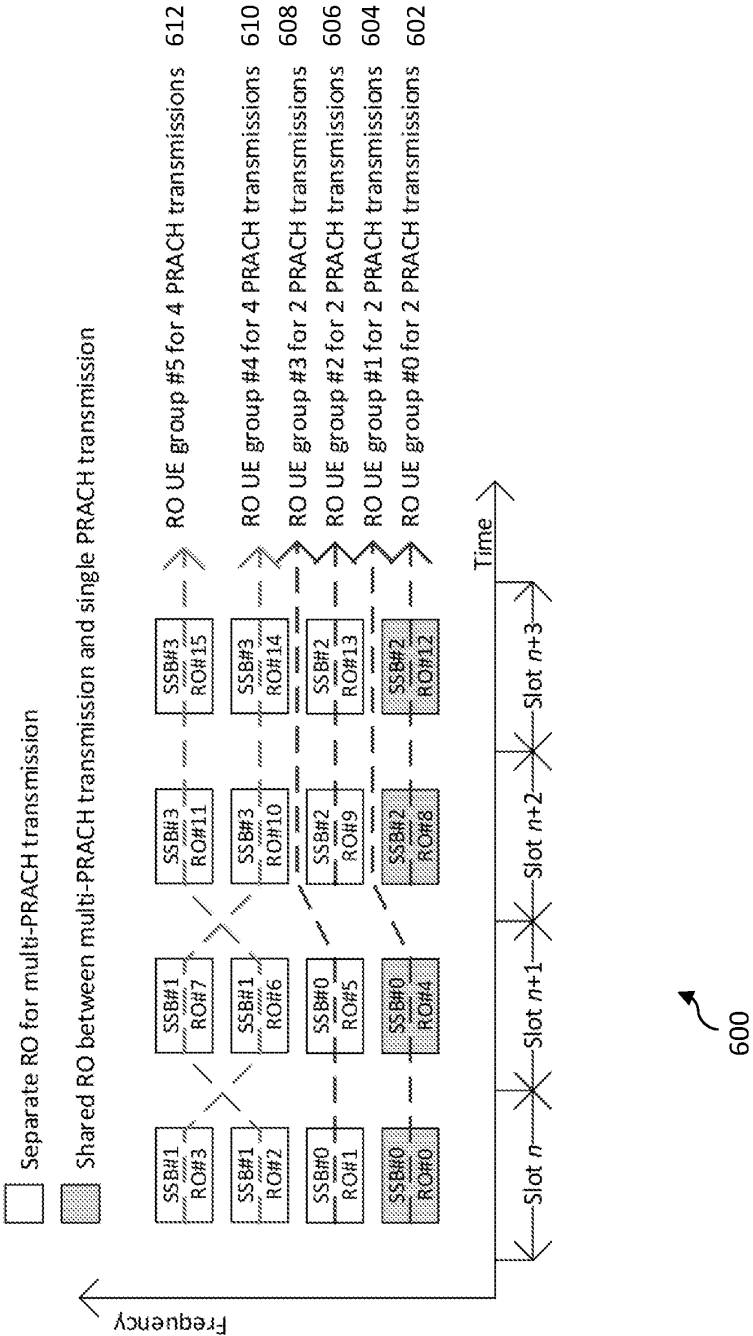


Fig. 6

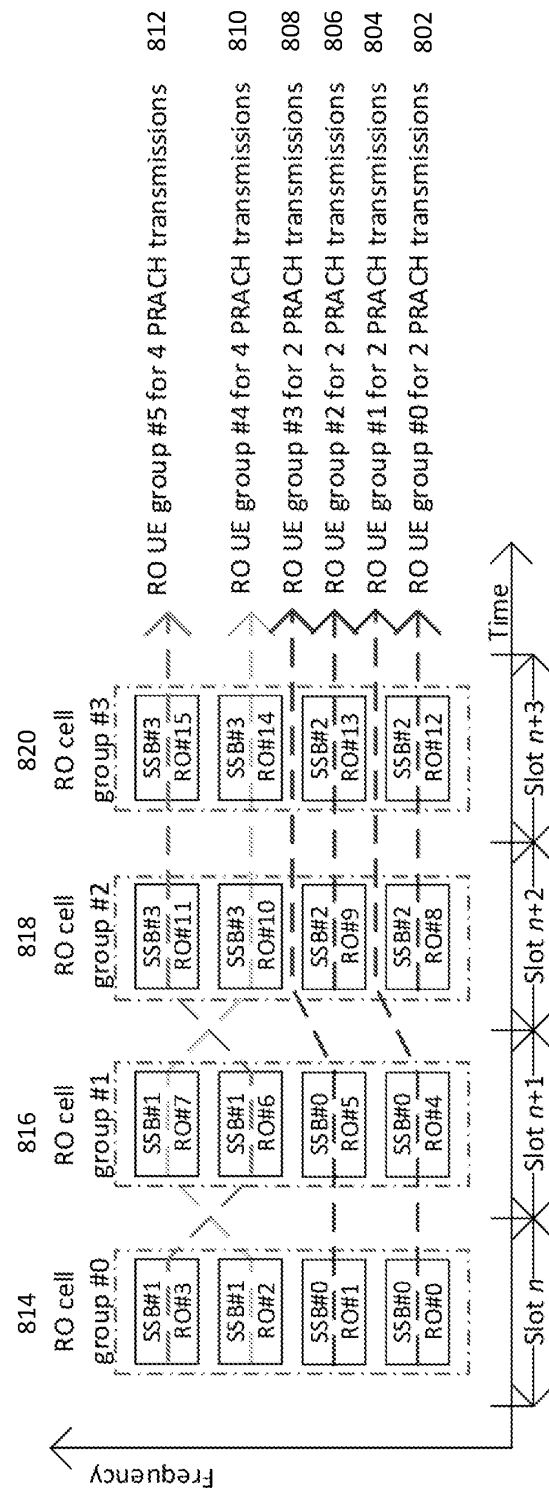
Embodiment #	Determination of the at least one RO UE group	Determination of RO cell group
1	Option 1	For $M=1$
2	Option 2	For $M=1$
3	Option 3	For $M=1$
4	Option 1	Method 1 for $M>1$
5	Option 1	Method 2 for $M>1$
6	Option 1	Method 3 for $M>1$
7	Option 1	Method 4 for $M>1$
8	Option 1	Method 5 for $M>1$
9	Option 2	Method 1 for $M>1$
10	Option 2	Method 2 for $M>1$
11	Option 2	Method 3 for $M>1$
12	Option 2	Method 4 for $M>1$
13	Option 2	Method 5 for $M>1$
14	Option 3	Method 1 for $M>1$
15	Option 3	Method 2 for $M>1$
16	Option 3	Method 3 for $M>1$
17	Option 3	Method 4 for $M>1$
18	Option 3	Method 5 for $M>1$

702

704

700

Fig. 7



800

Fig. 8

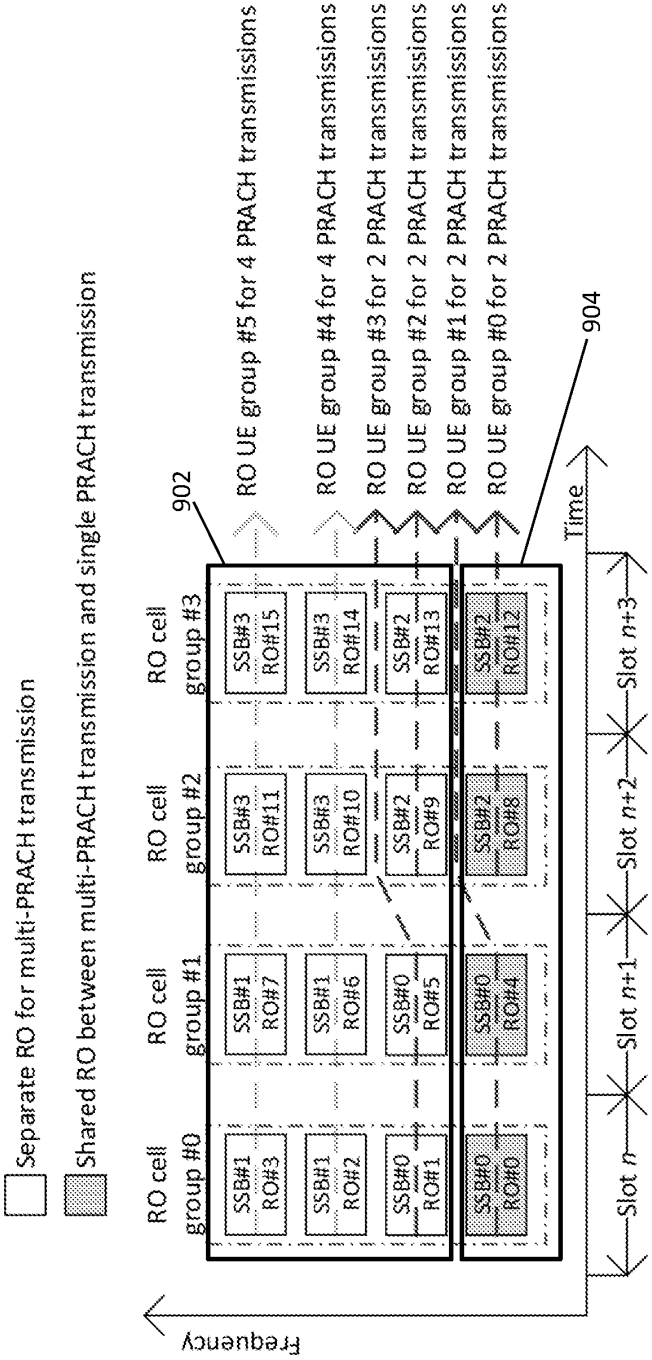


Fig. 9

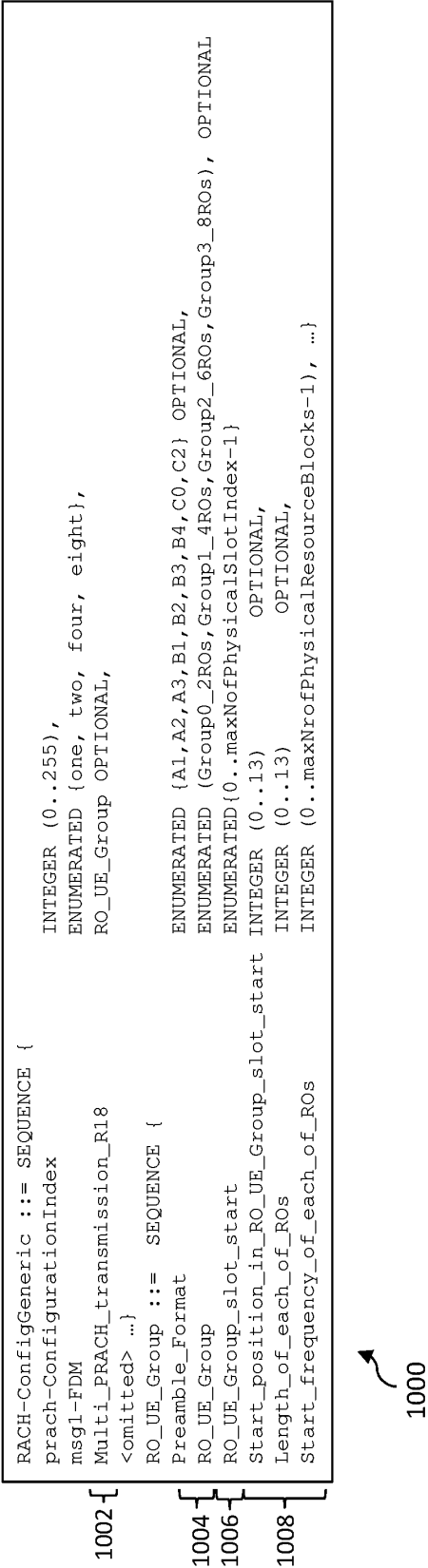


Fig. 10

RO UE group index	Preamble format	N ROs
0	A1	RO#8, RO#12
1	A1	RO#0, RO#4
2	A2	RO#1, RO#5, RO#9, RO#13
3	A2	RO#2, RO#7, RO#10, RO#14
4	A3	RO#3, RO#6, RO#11, RO#15
...	...	...
M-1	A3	RO#4, RO#6, RO#12, RO#15

1100

Fig. 11

1202

PRACH Configuration Index	Preamble format	$n_{SFN} \bmod x = y$		Subframe number	Starting symbol	Number of PRACH slots within a subframe	$N_t^{RA,slot}$, number of time domain PRACH occasions within a PRACH slot	N_{dur}^{RA} , PRACH duration	Multi-PRACH transmission	
		x	y						N=2	N=4
67	A1	16	1	9	0	2	6	2	RO#8, RO#12	RO#1, RO#5, RO#9, RO#13

1200

Fig. 12

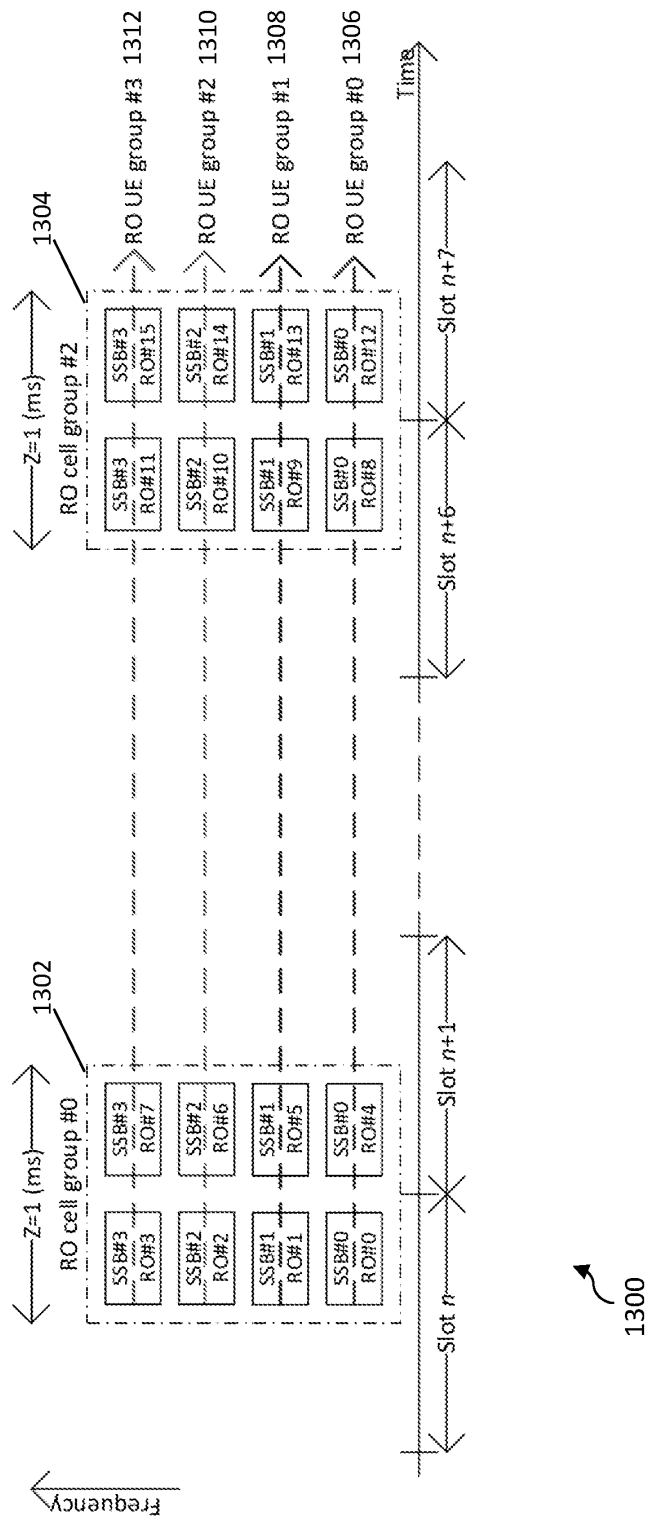
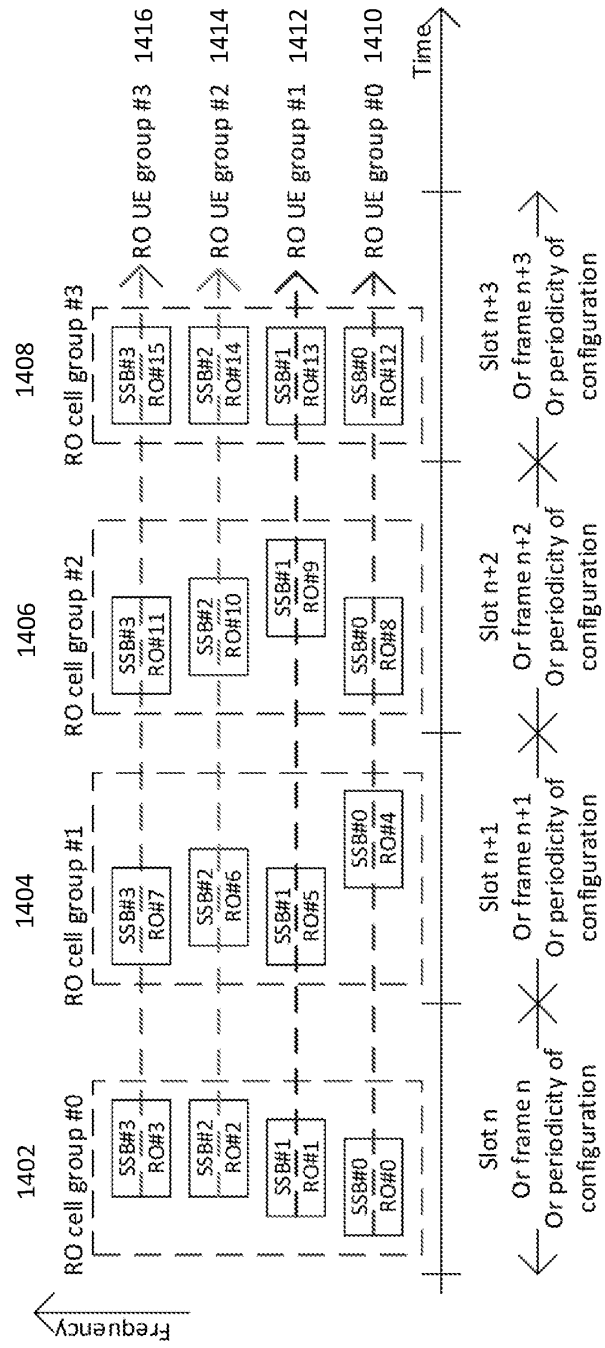


Fig. 13



1400

Fig. 14

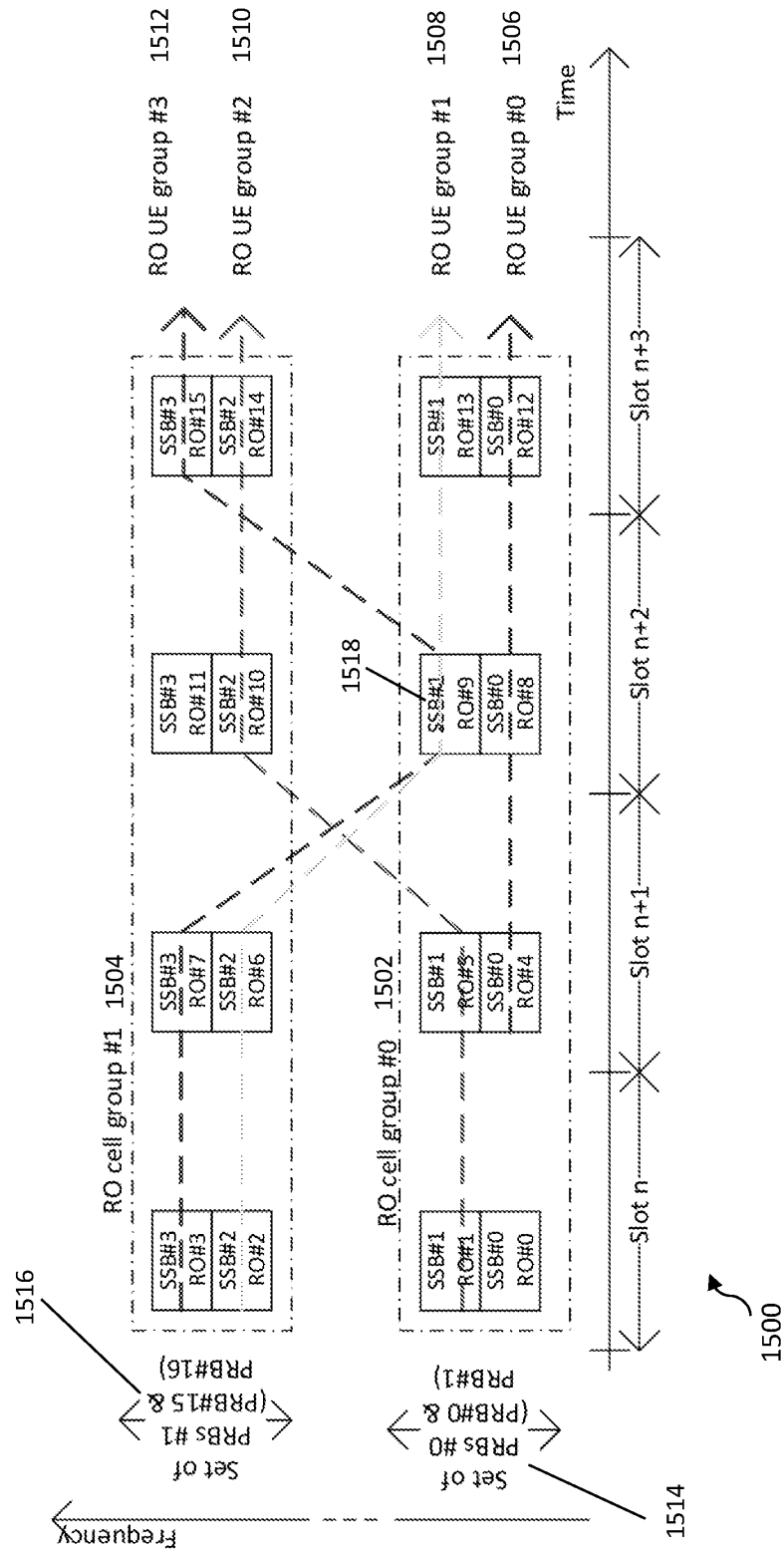


Fig. 15

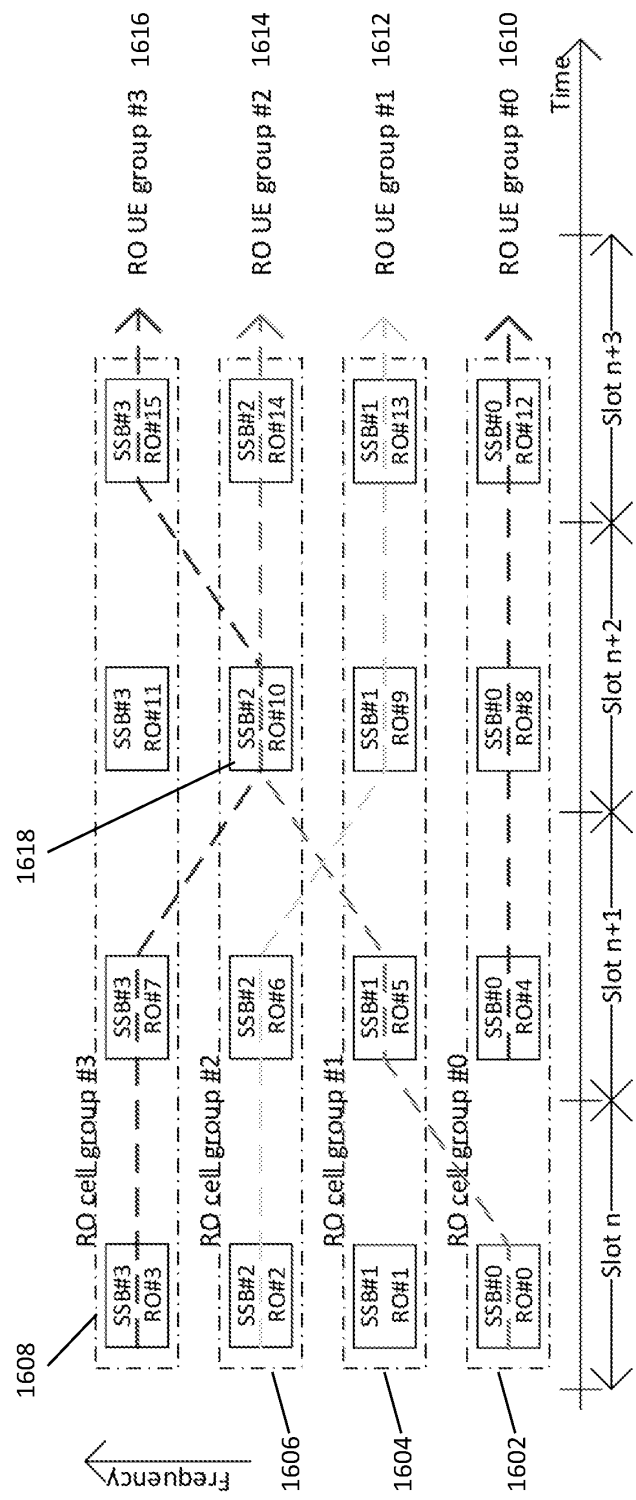


Fig. 16

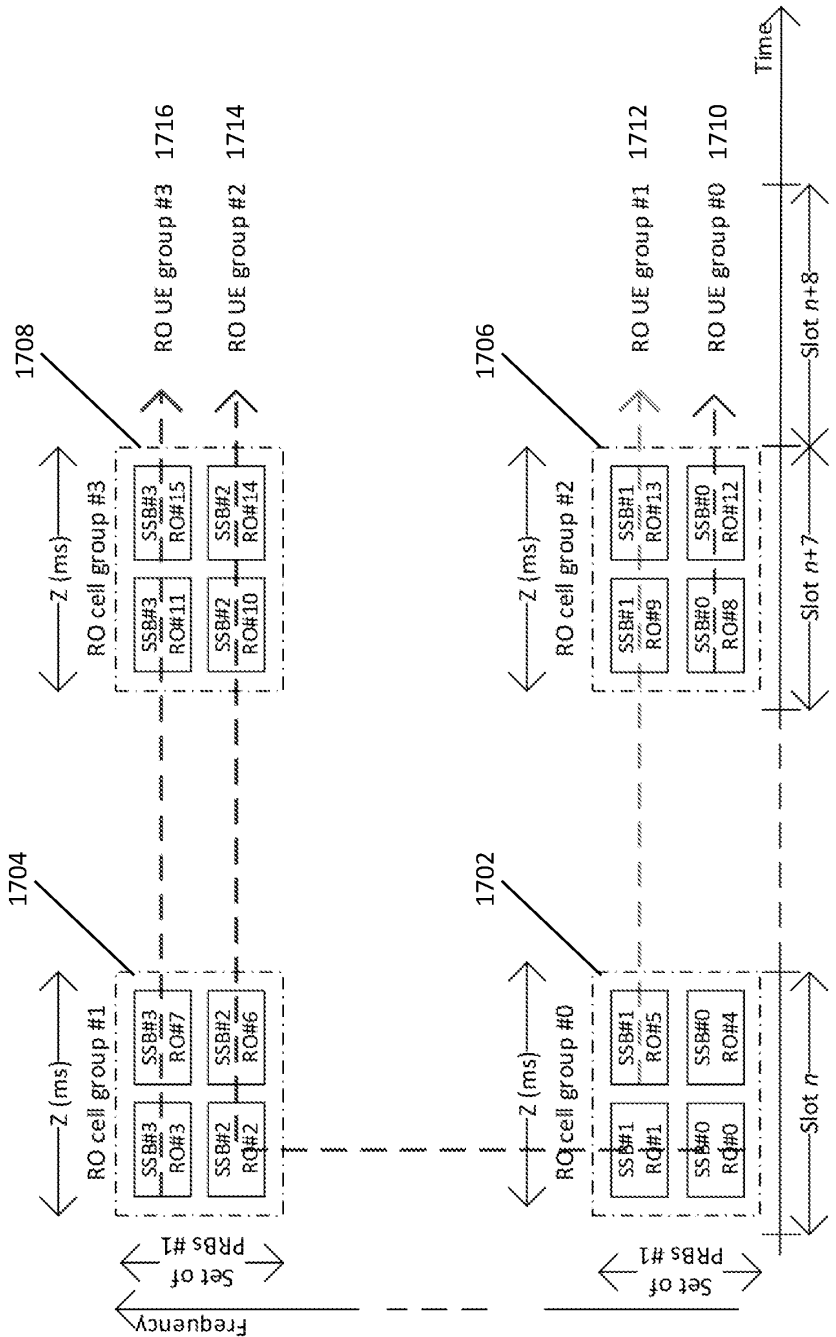


Fig. 17

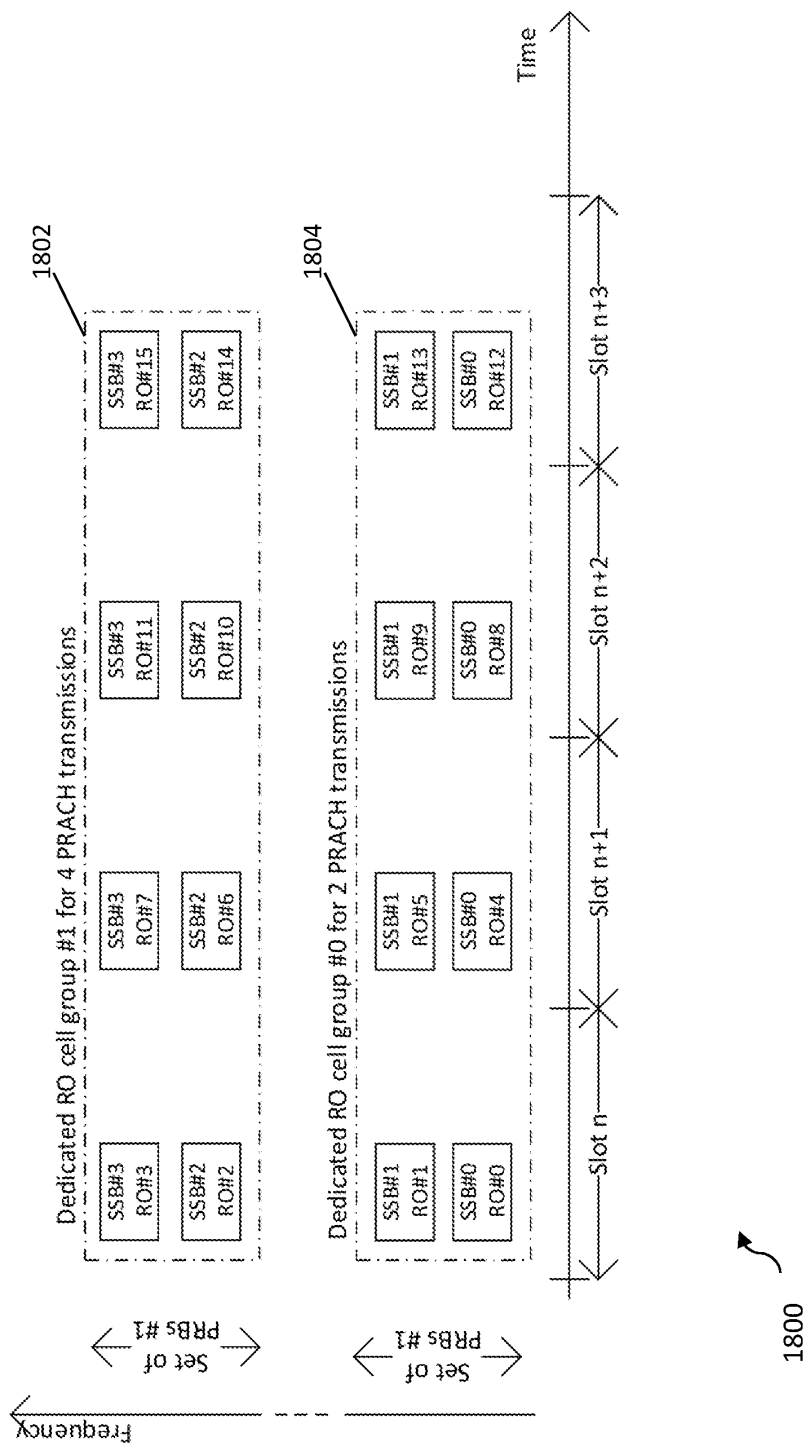


Fig. 18

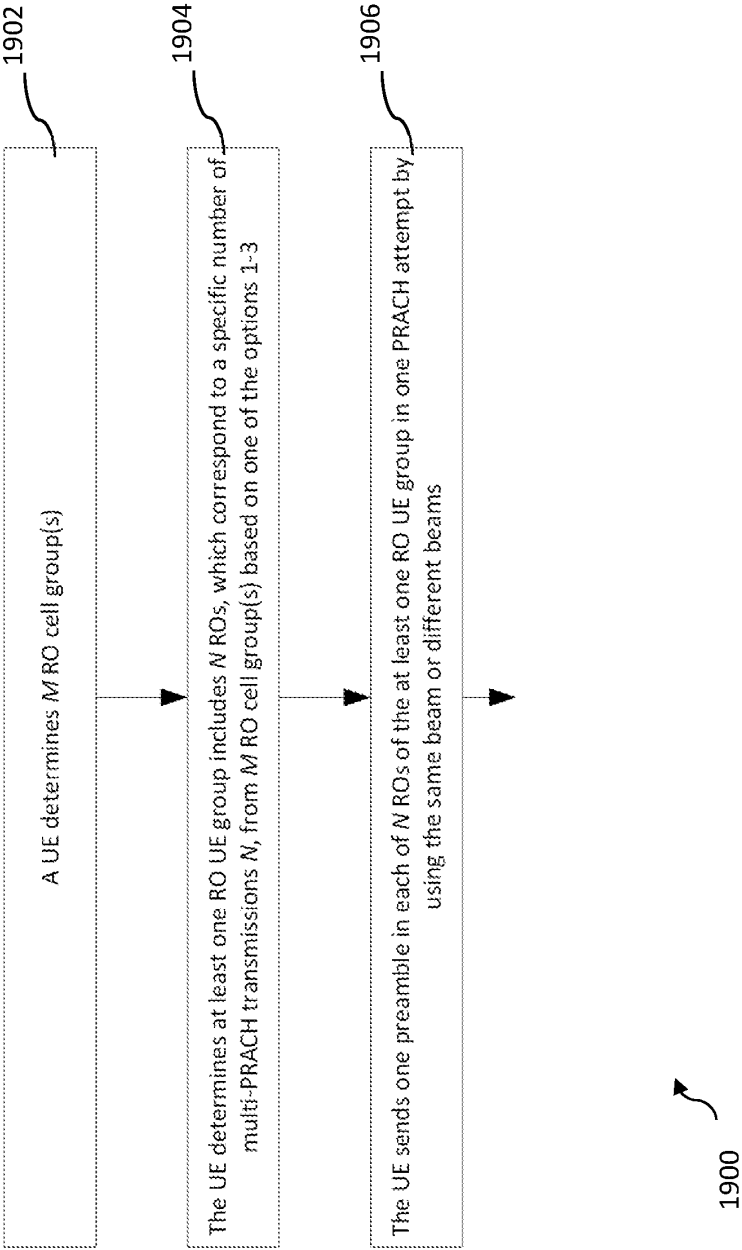


Fig. 19

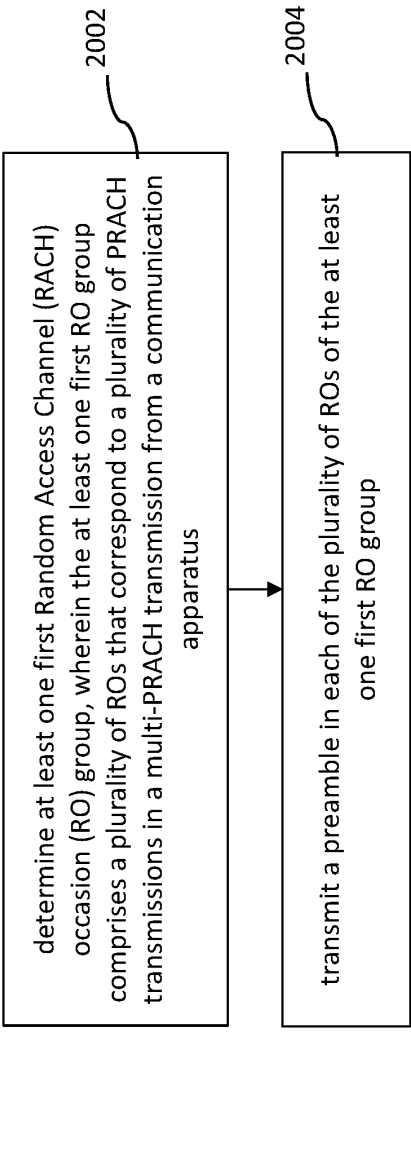


Fig. 20

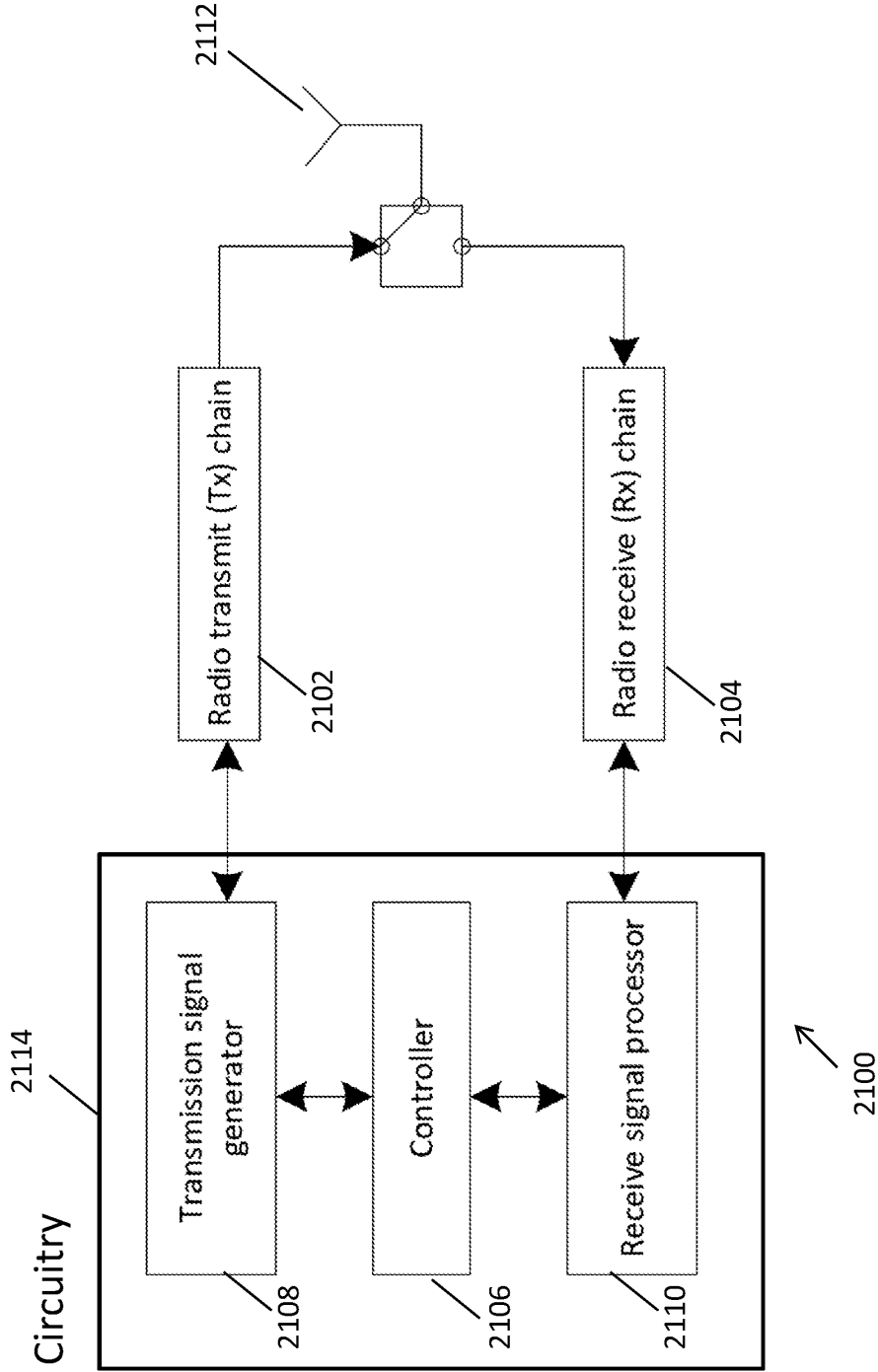


Fig. 21

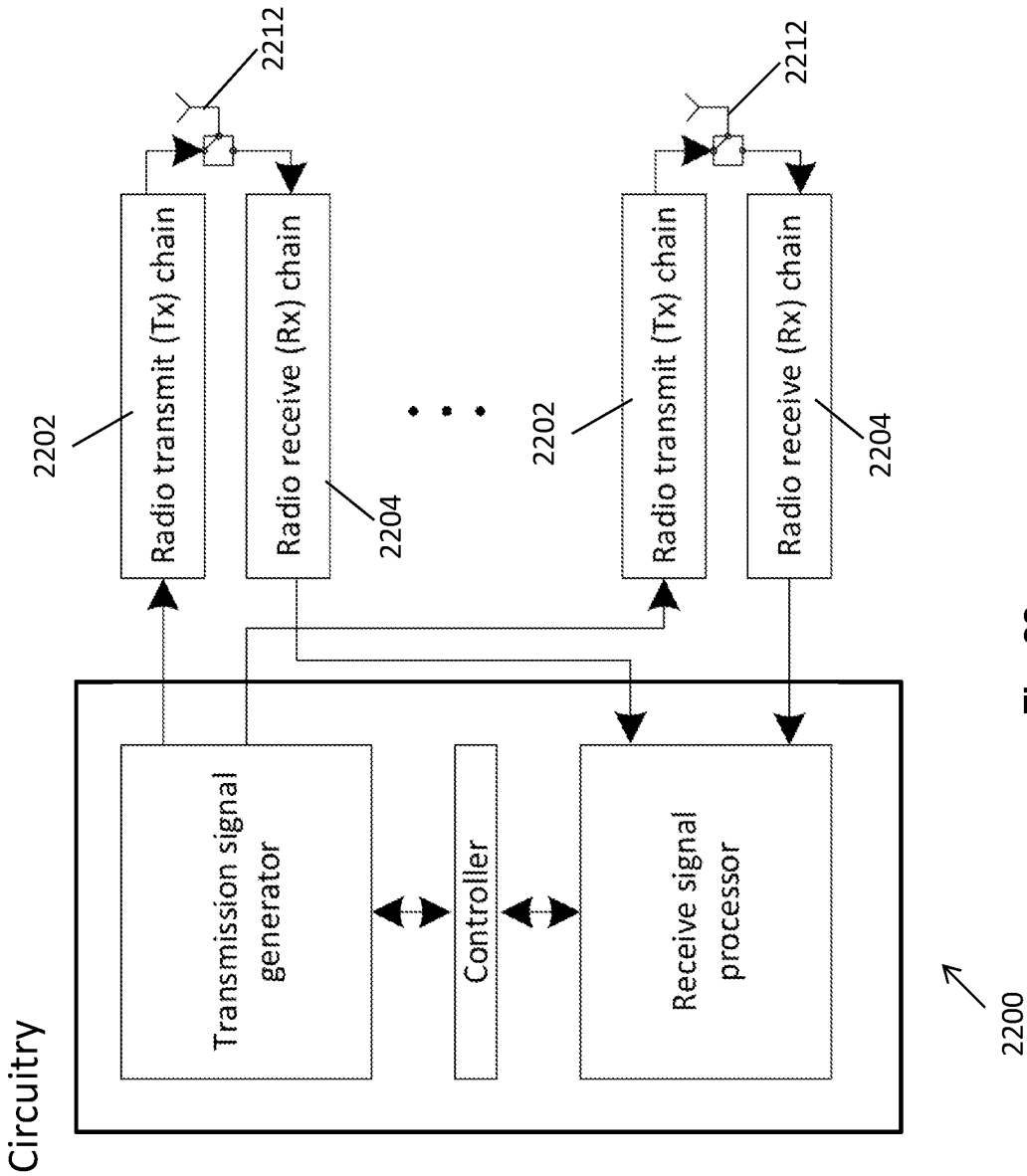


Fig. 22