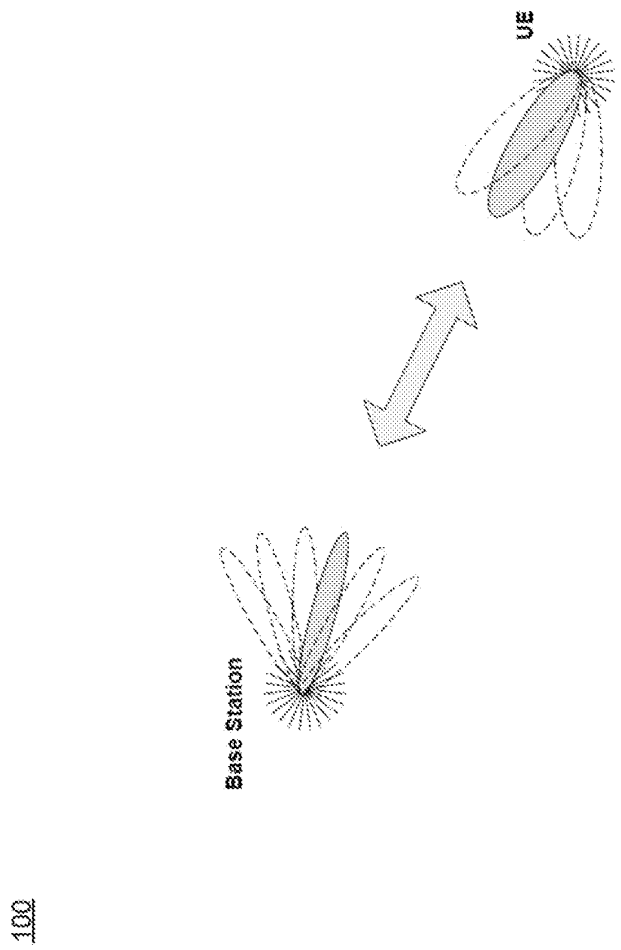

FIG. 1

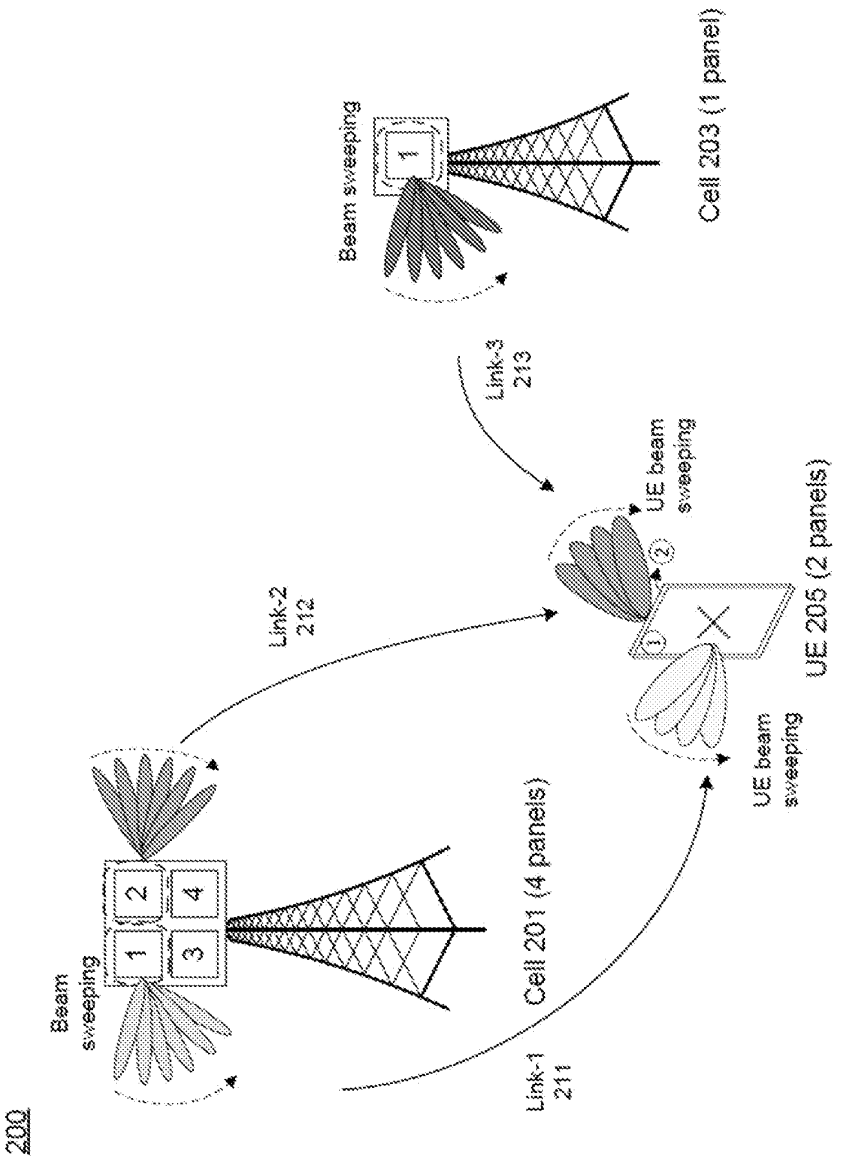
200
Beam sweeping
1
2
3
4
Cell 201 (4 panels)
Link-1
211
Link-2
212
Link-3
213
Beam sweeping
1
Cell 203 (1 panel)
UE beam sweeping
1
2
UE beam sweeping
UE 205 (2 panels)

FIG. 2

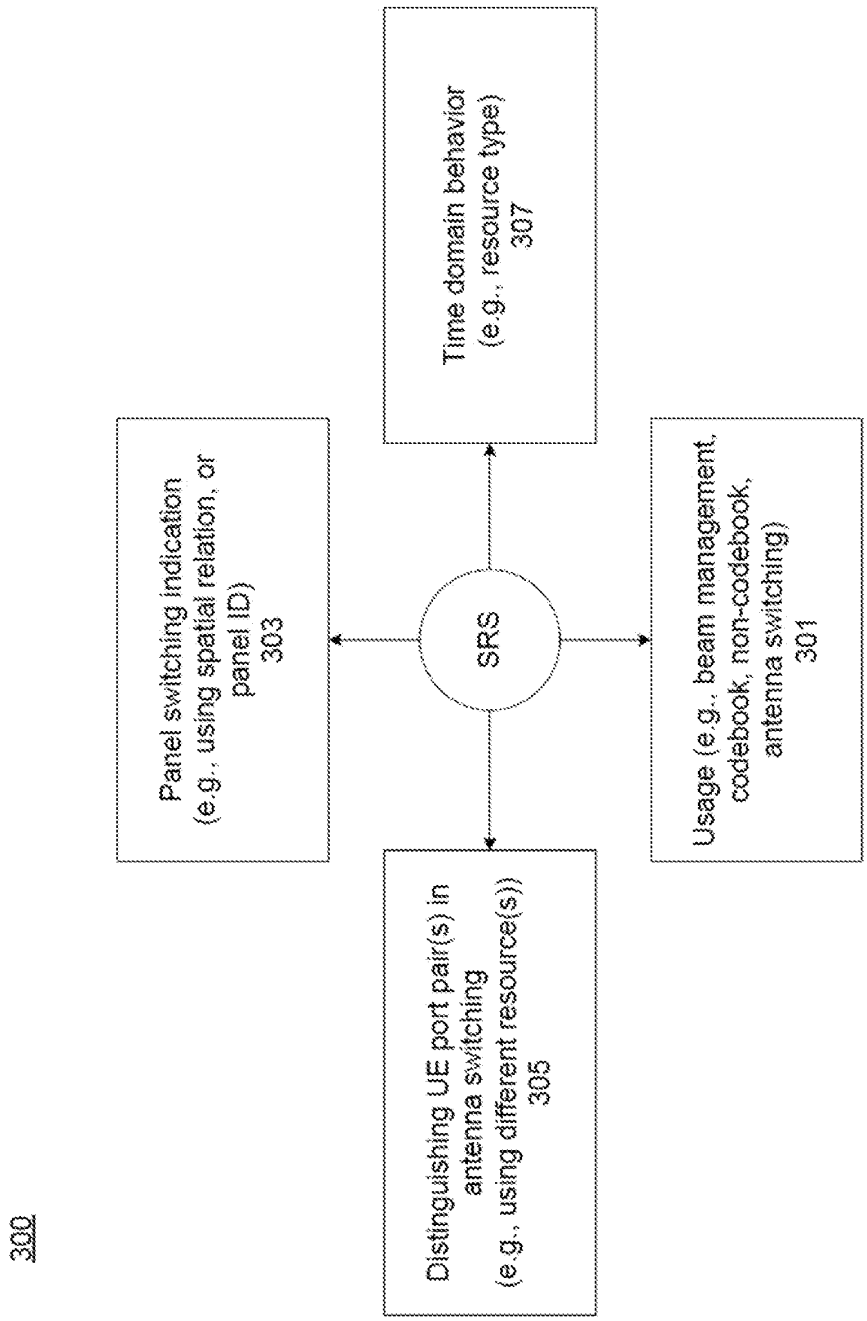
300
Time domain behavior
(e.g., resource type)
307
Panel switching indication
(e.g., using spatial relation, or
panel ID)
303
SRS
Usage (e.g., beam management,
codebook, non-codebook,
antenna switching)
301
Distinguishing UE port pair(s) in
antenna switching
(e.g., using different resource(s))
305

FIG. 3

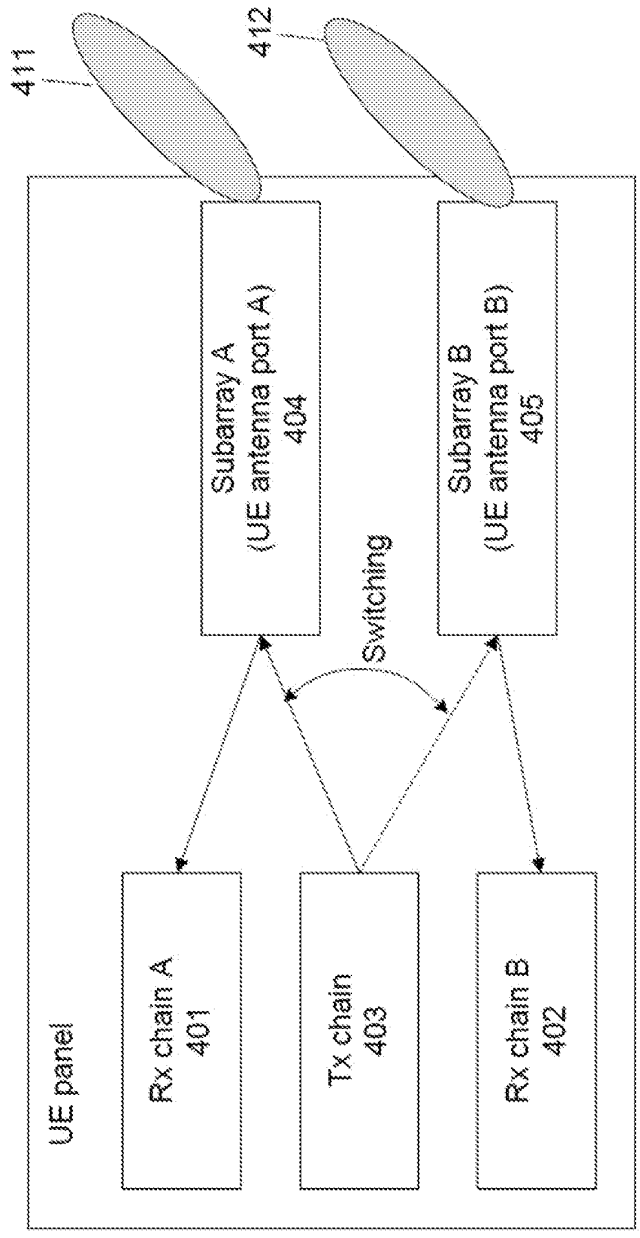
411
412
Subarray A
(UE antenna port A)
404
Subarray B
(UE antenna port B)
405
Switching
UE panel
Rx chain A
401
Tx chain
403
Rx chain B
402

FIG. 4A

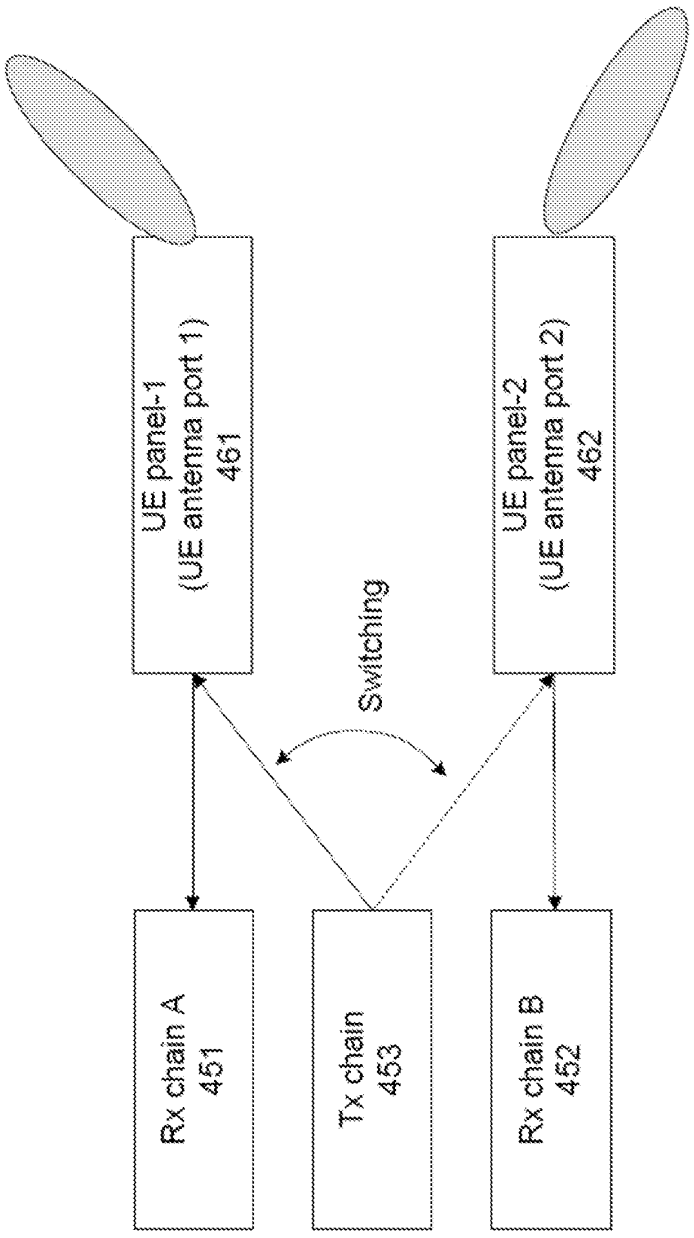
UE panel-1
(UE antenna port 1)
461
UE panel-2
(UE antenna port 2)
462
Switching
Rx chain A
451
Tx chain
453
Rx chain B
452

FIG. 4B

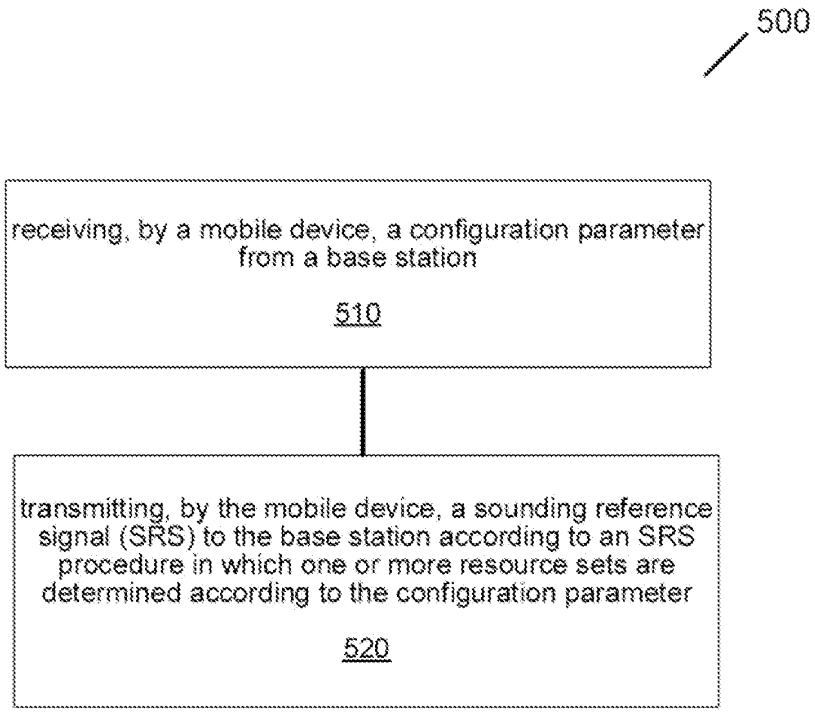
500
receiving, by a mobile device, a configuration parameter from a base station
510
transmitting, by the mobile device, a sounding reference signal (SRS) to the base station according to an SRS procedure in which one or more resource sets are determined according to the configuration parameter
520

FIG. 5A

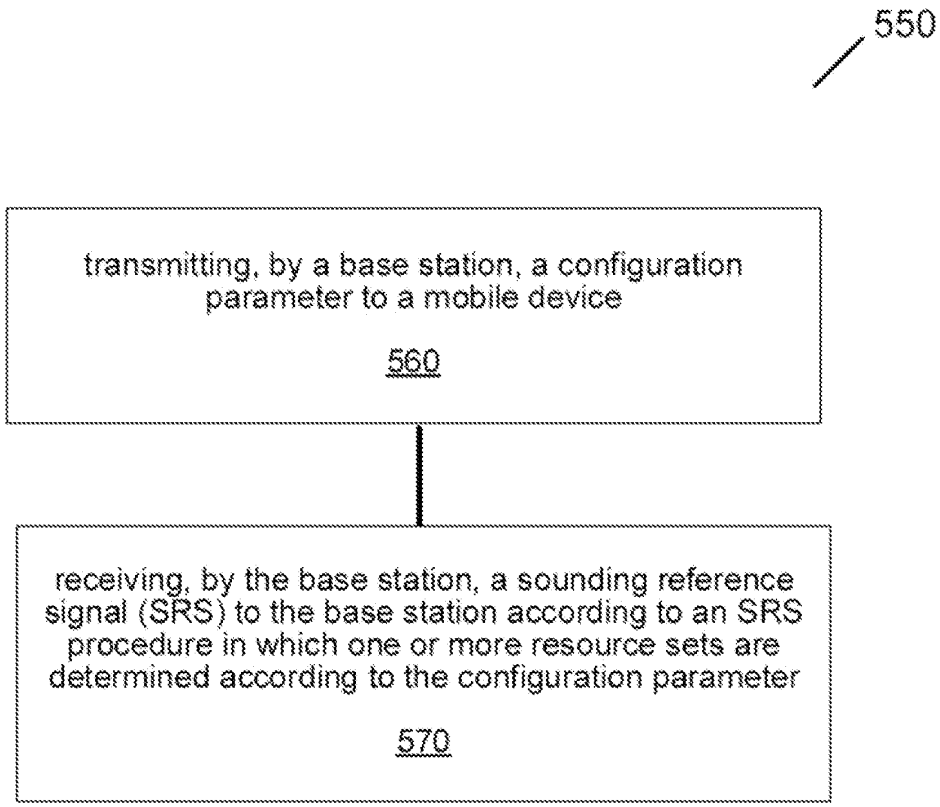
550
transmitting, by a base station, a configuration parameter to a mobile device
560
receiving, by the base station, a sounding reference signal (SRS) to the base station according to an SRS procedure in which one or more resource sets are determined according to the configuration parameter
570

FIG. 5B

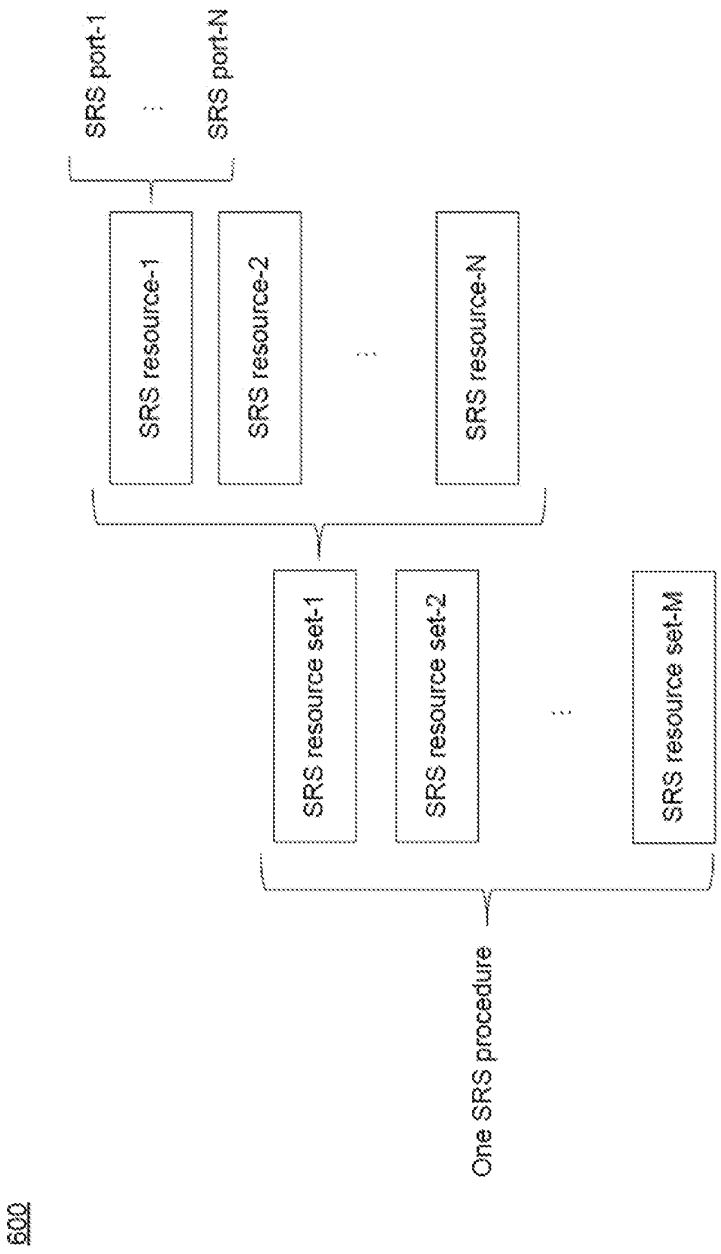
600
One SRS procedure
SRS resource set-1
SRS resource set-2
SRS resource set-M
SRS resource-1
SRS resource-2
SRS resource-N
SRS port-1
SRS port-N

FIG. 6

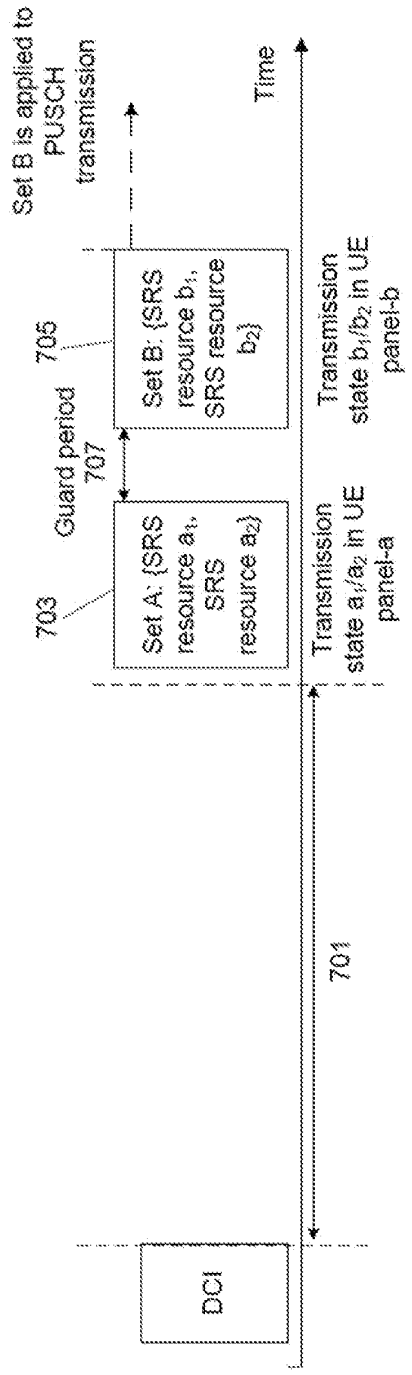
Set B is applied to PUSCH transmission
Time
705
Set B: {SRS resource b_1, SRS resource b_2}
Guard period 707
703
Set A: {SRS resource a_1, SRS resource a_2}
Transmission state a_1/a_2 in UE panel-a
Transmission state b_1/b_2 in UE panel-b
701
DCI

FIG. 7

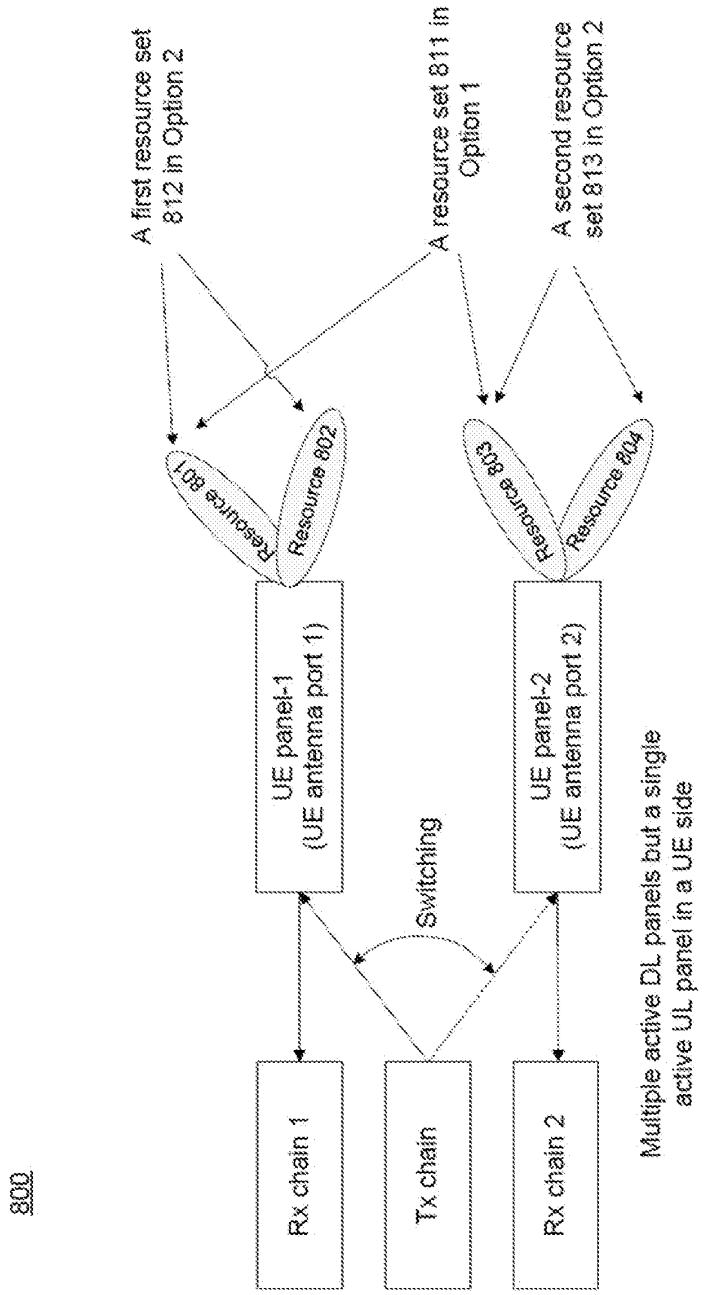
800
A first resource set 812 in Option 2
A resource set 811 in Option 1
A second resource set 813 in Option 2
Resource 801
Resource 802
Resource 803
Resource 804
UE panel-1 (UE antenna port 1)
UE panel-2 (UE antenna port 2)
Switching
Rx chain 1
Tx chain
Rx chain 2
Multiple active DL panels but a single active UL panel in a UE side

FIG. 8

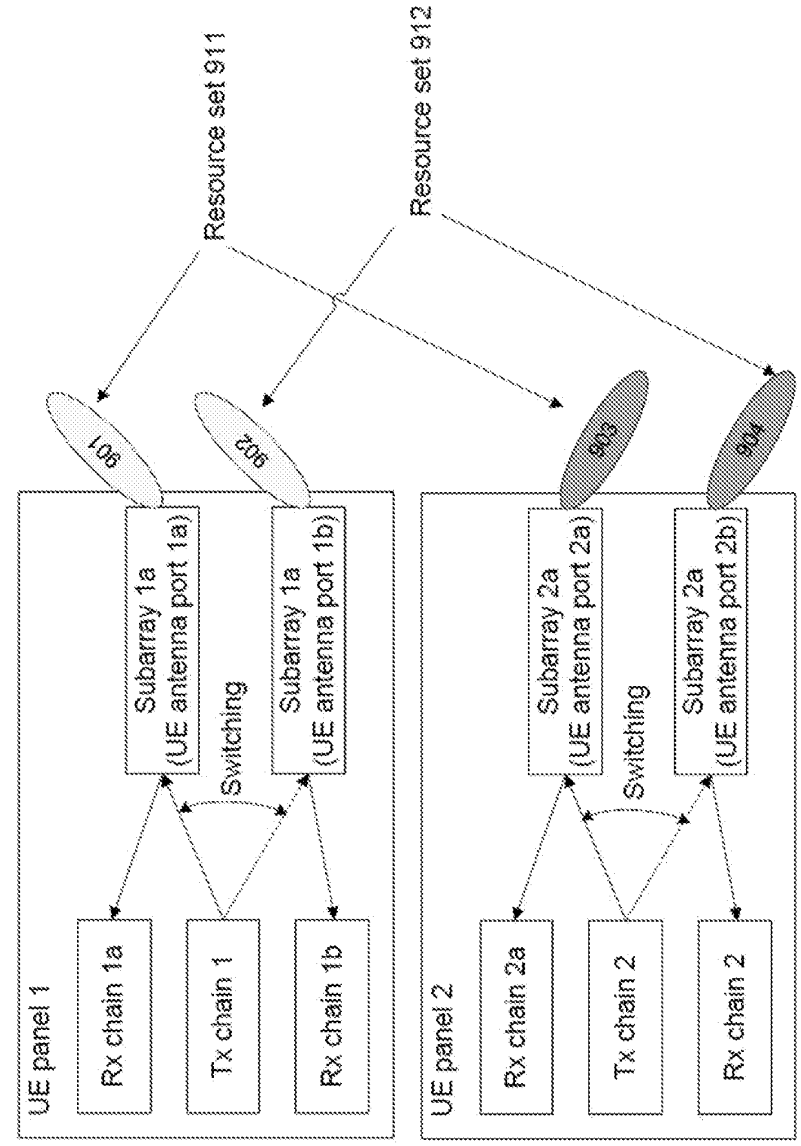
900
Resource set 911
Resource set 912
901
902
903
904
UE panel 1
Rx chain 1a
Tx chain 1
Rx chain 1b
Switching
Subarray 1a
(UE antenna port 1a)
Subarray 1a
(UE antenna port 1b)
UE panel 2
Rx chain 2a
Tx chain 2
Rx chain 2
Switching
Subarray 2a
(UE antenna port 2a)
Subarray 2a
(UE antenna port 2b)

FIG. 9

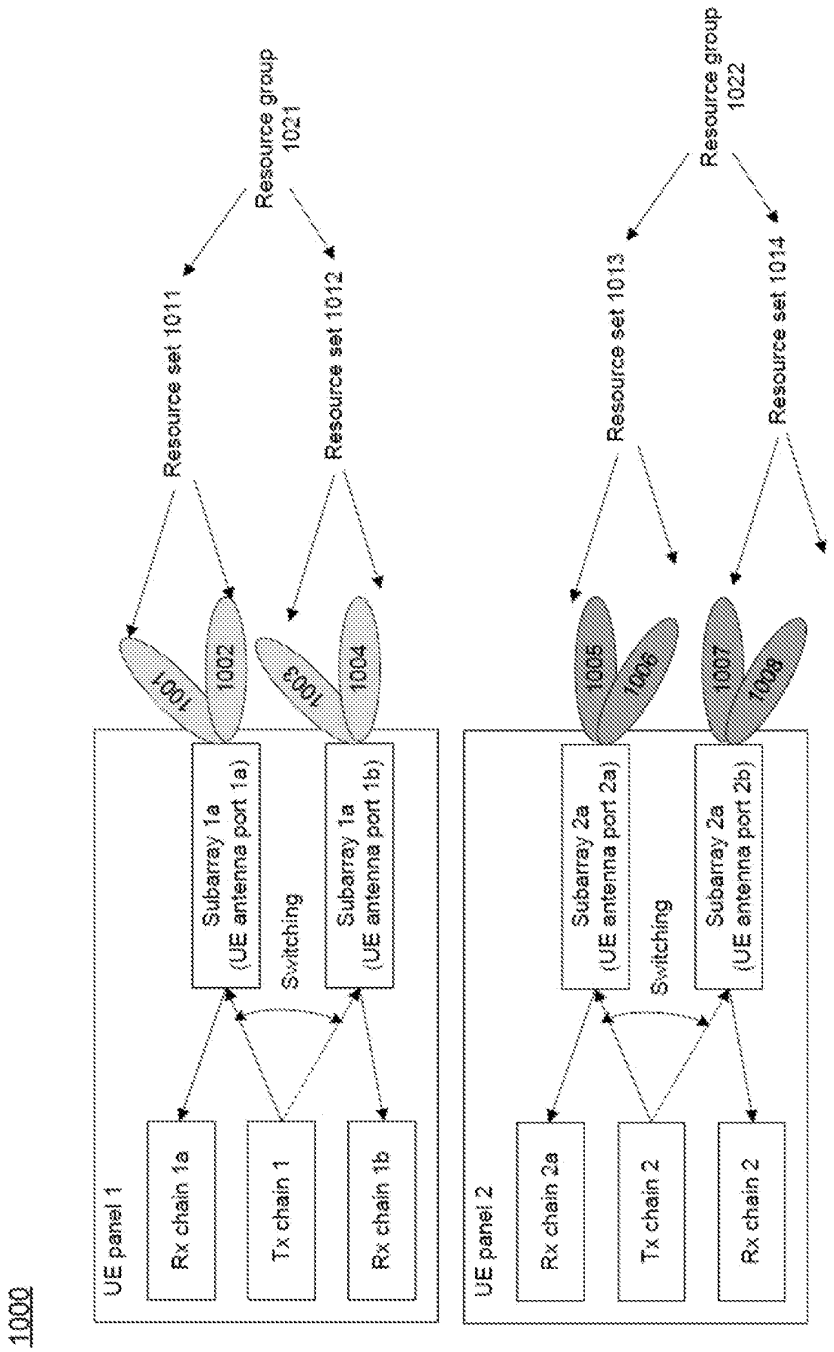
1000
UE panel 1
Rx chain 1a
Tx chain 1
Rx chain 1b
Switching
Subarray 1a
(UE antenna port 1a)
Subarray 1a
(UE antenna port 1b)
1001
1002
1003
1004
Resource set 1011
Resource set 1012
Resource group
1021
UE panel 2
Rx chain 2a
Tx chain 2
Rx chain 2
Switching
Subarray 2a
(UE antenna port 2a)
Subarray 2a
(UE antenna port 2b)
1005
1006
1007
1008
Resource set 1013
Resource set 1014
Resource group
1022

FIG. 10

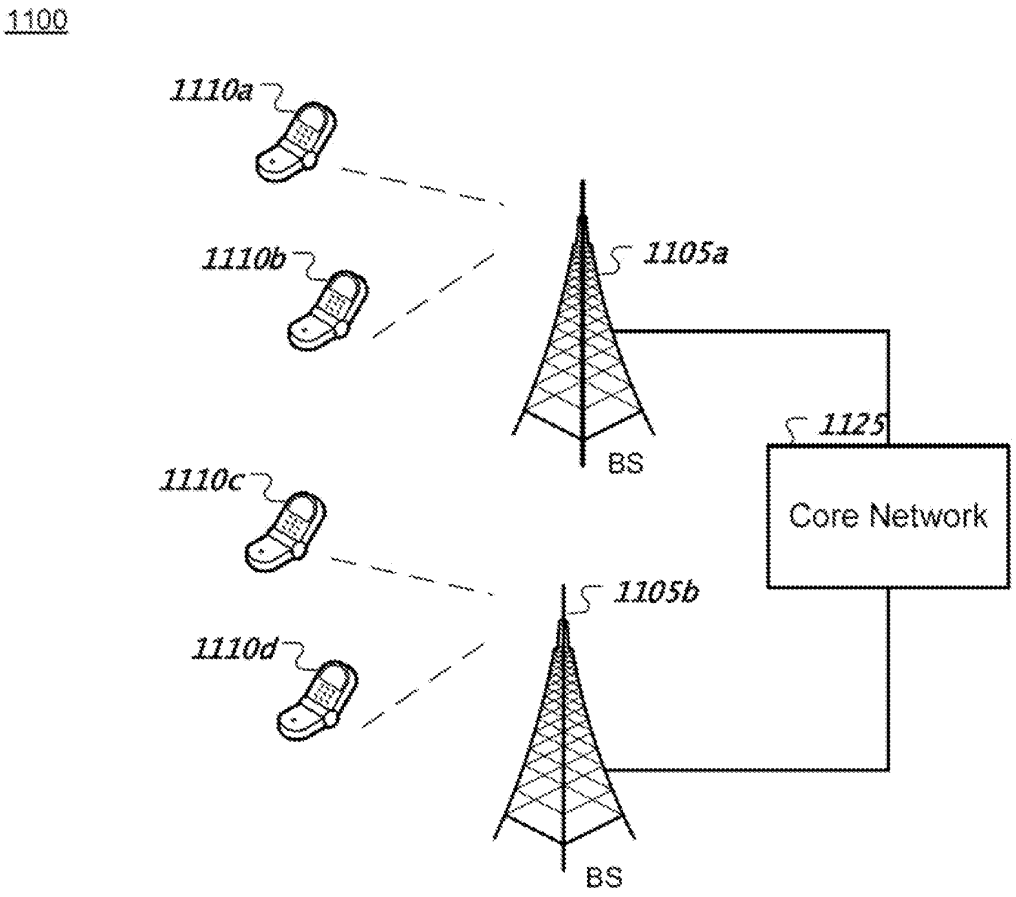
1100
1110a
1110b
1105a
1125
Core Network
1110c
1105b
1110d
BS
BS

FIG. 11

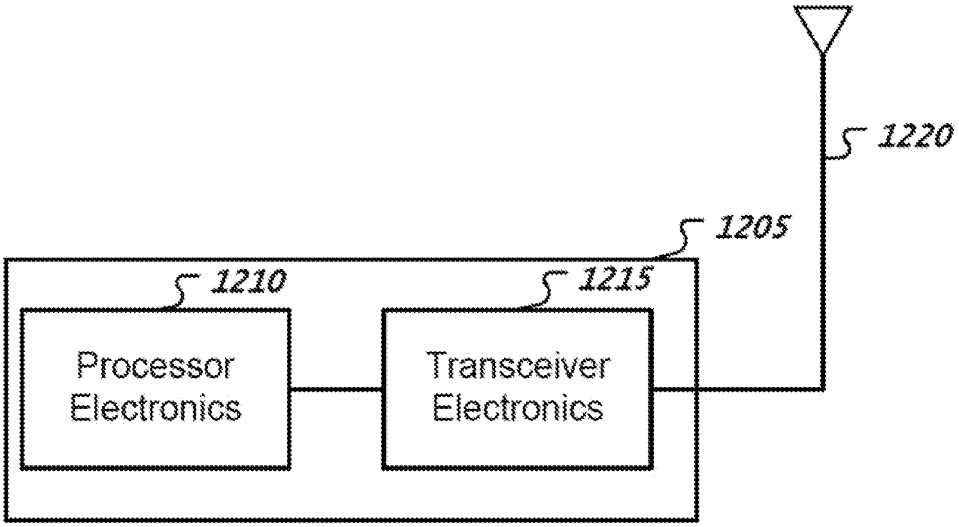
1220
1205
1210
1215
Processor Electronics
Transceiver Electronics

FIG. 12