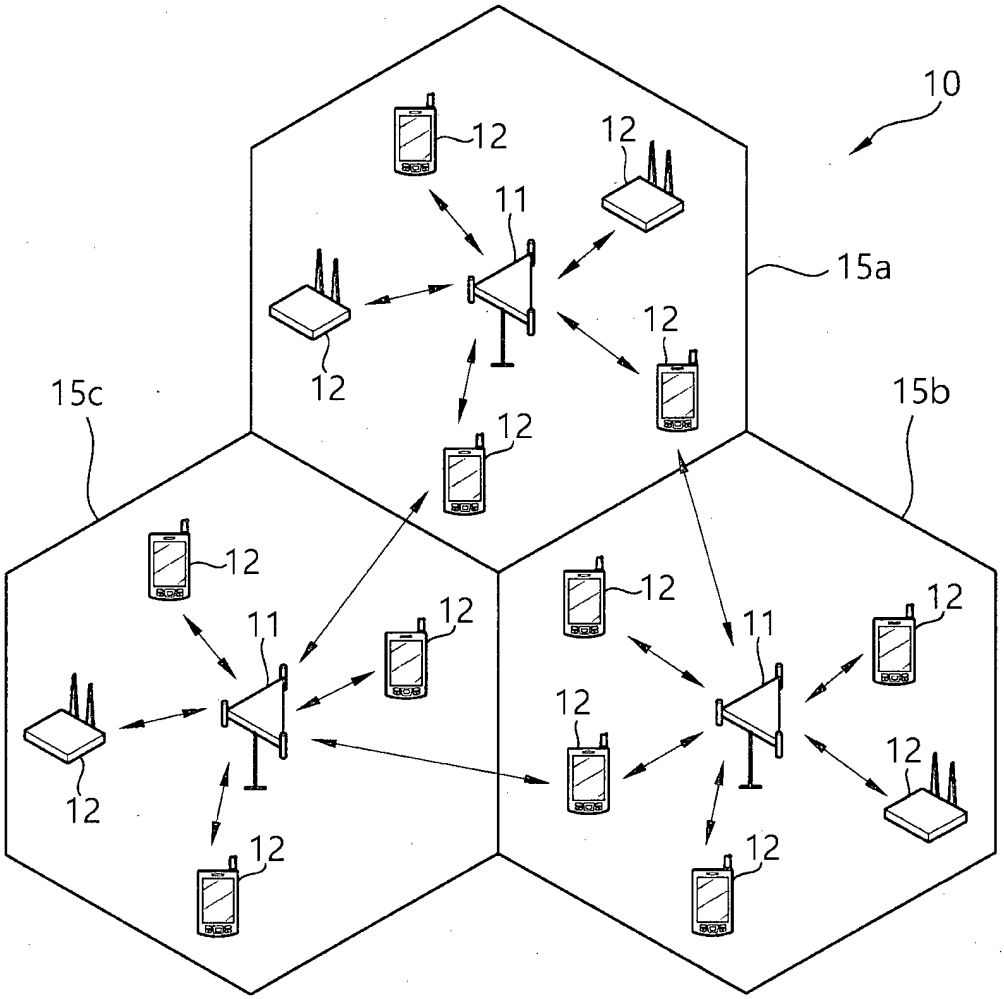
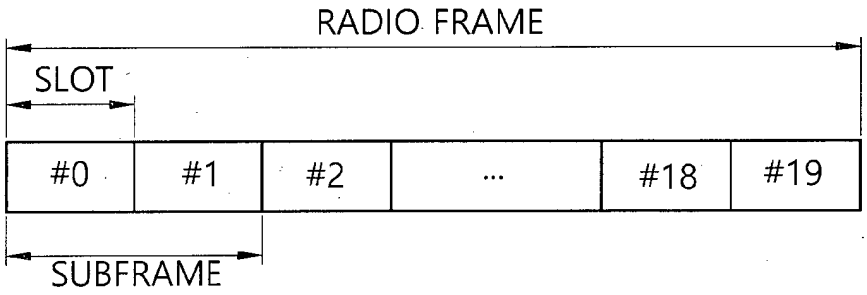
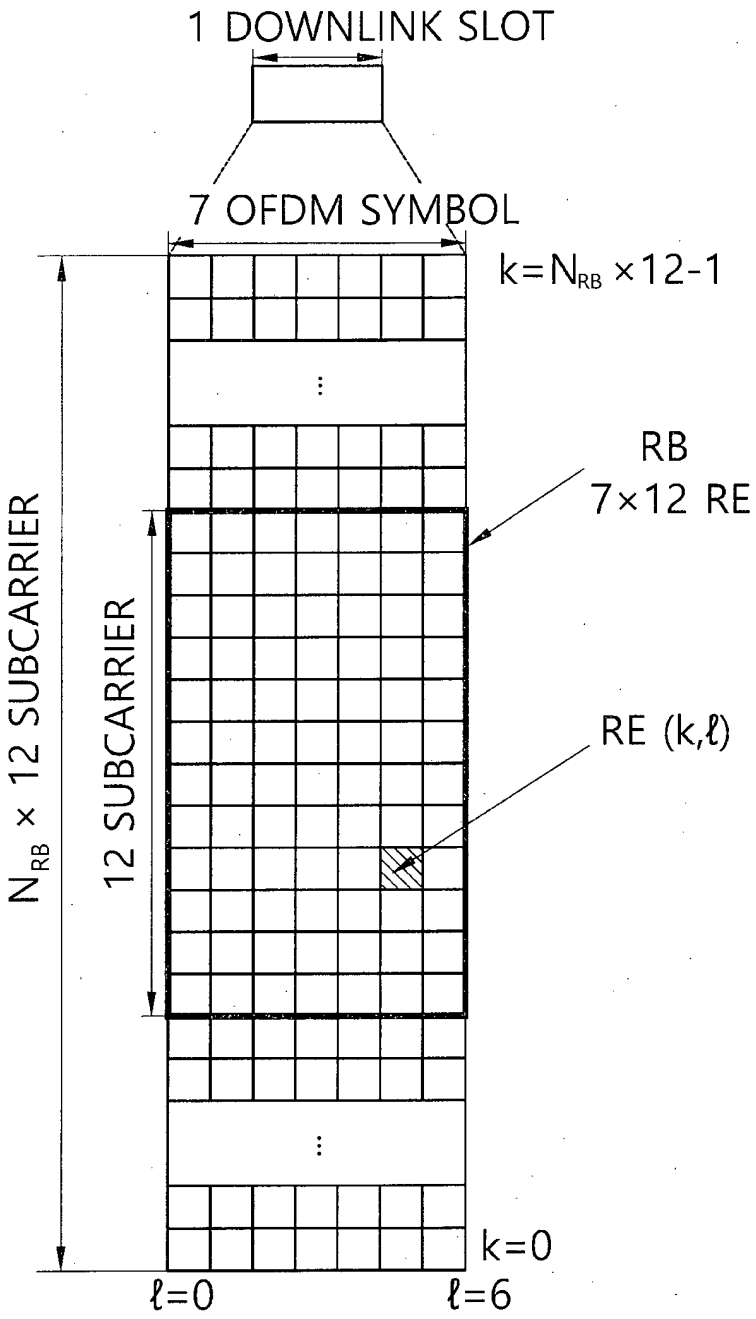
[Fig. 1]



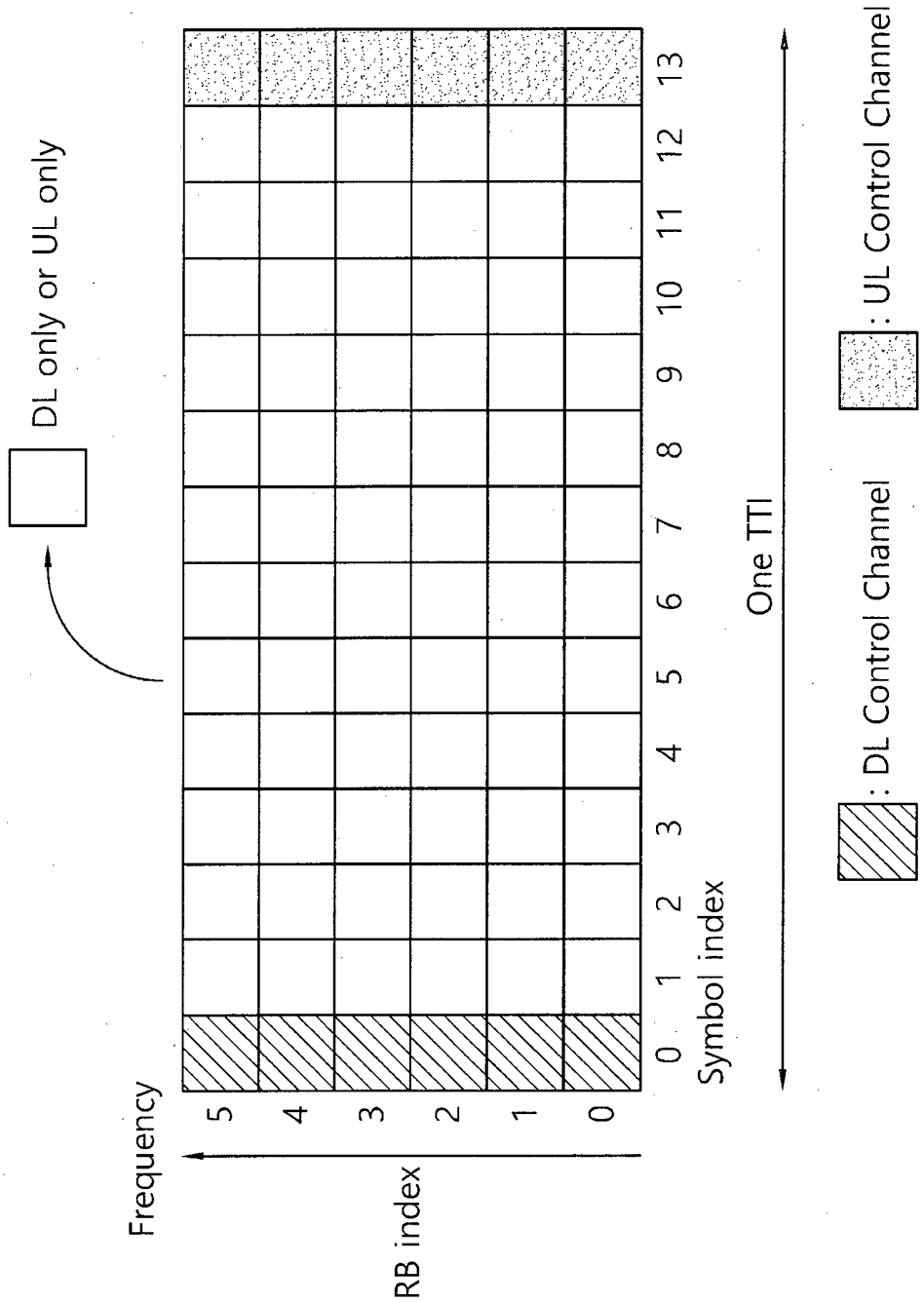
[Fig. 2]



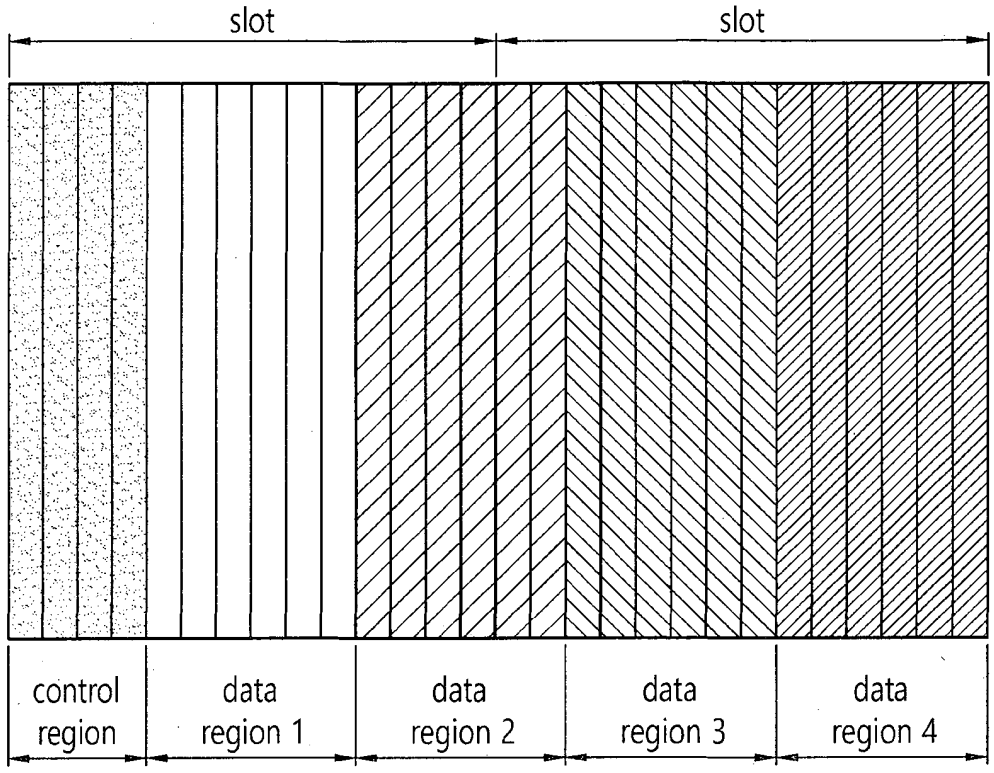
[Fig. 3]


1 DOWNLINK SLOT
7 OFDM SYMBOL
k=N_RB ×12-1
RB
7×12 RE
RE (k,ℓ)
N_RB × 12 SUBCARRIER
12 SUBCARRIER
k=0
ℓ=0
ℓ=6

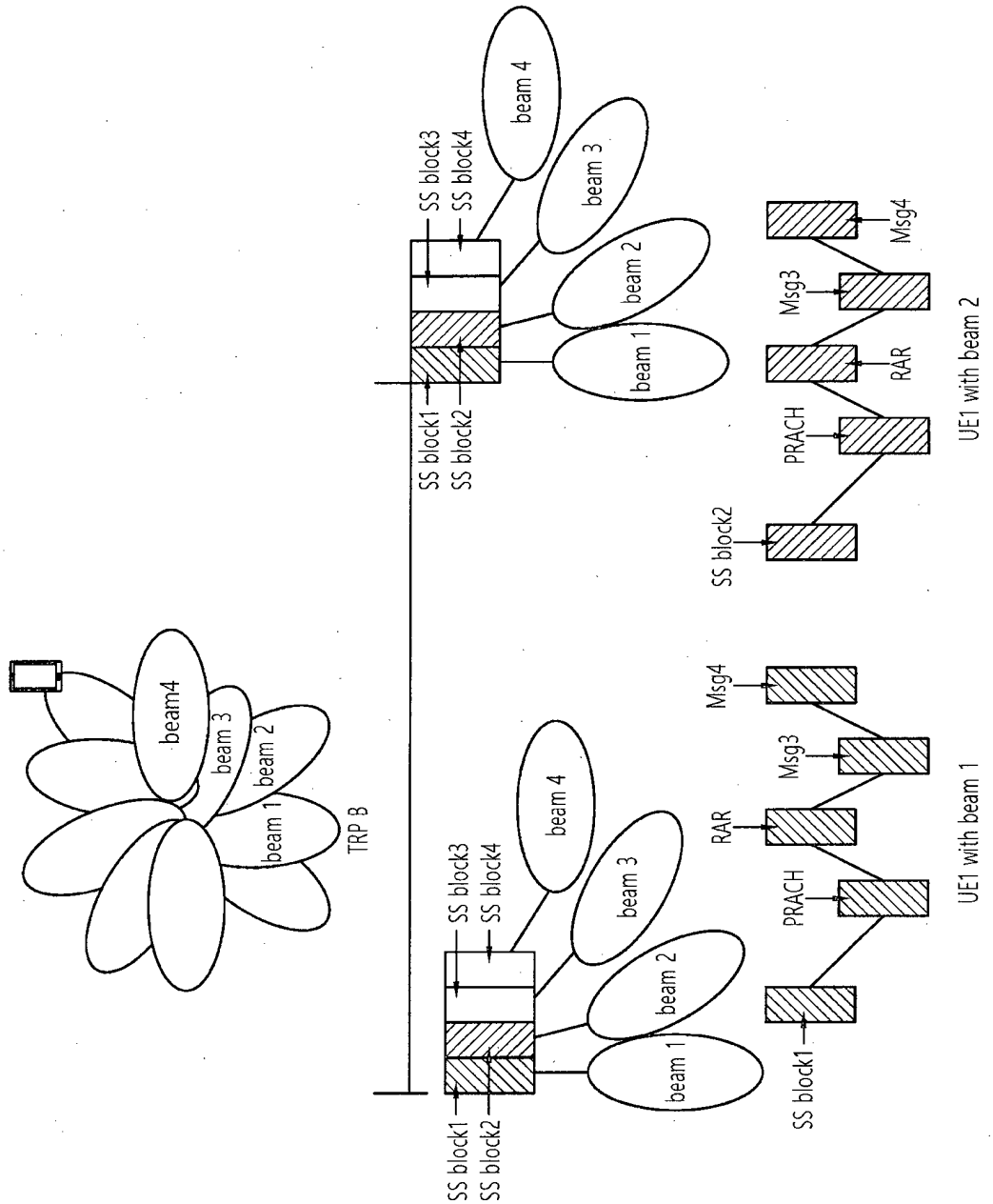
[Fig. 4]


DL only or UL only
Frequency
RB index
5
4
3
2
1
0
0 1 2 3 4 5 6 7 8 9 10 11 12 13
Symbol index
One TTI
: DL Control Channel
: UL Control Channel

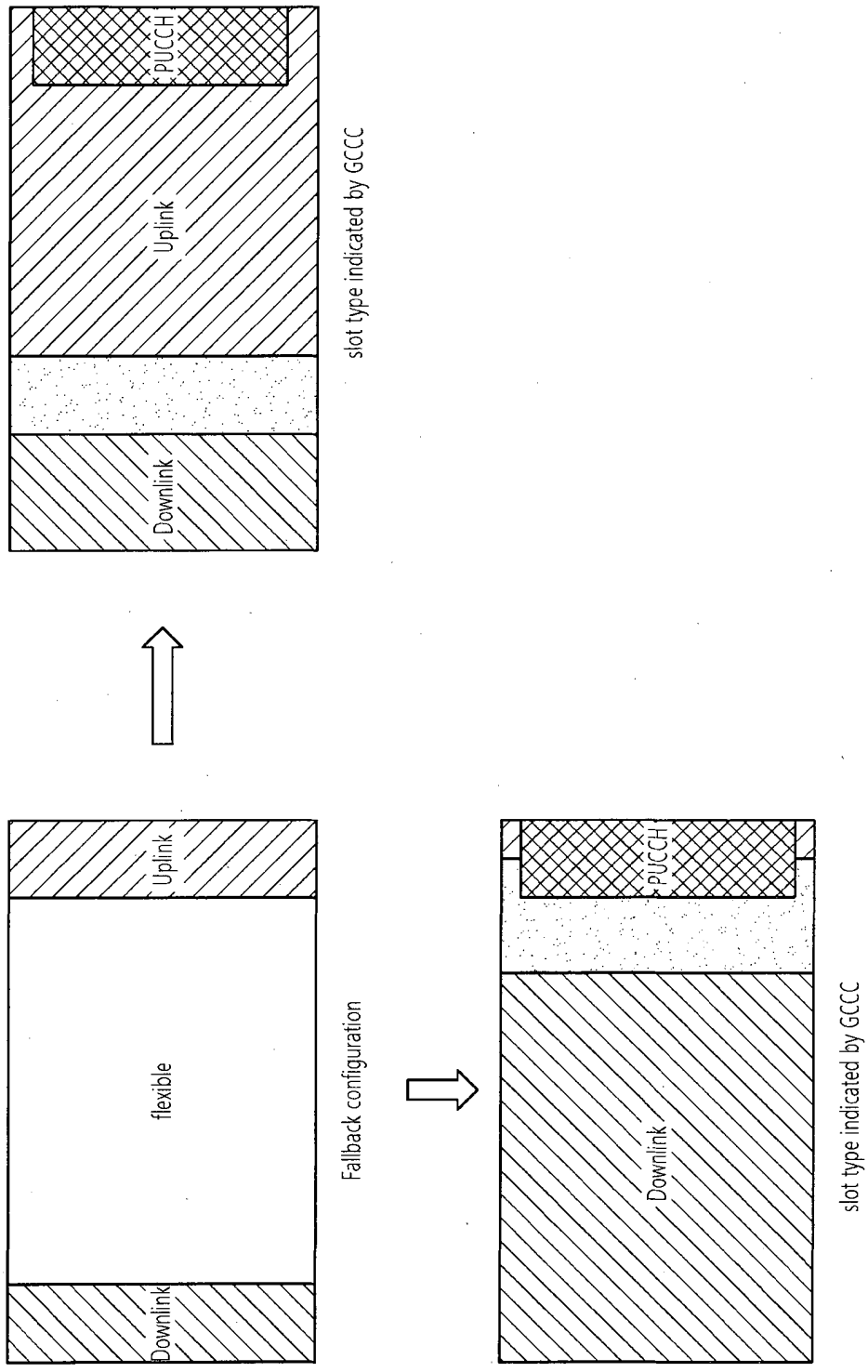
[Fig. 5]


slot
slot
control region
data region 1
data region 2
data region 3
data region 4

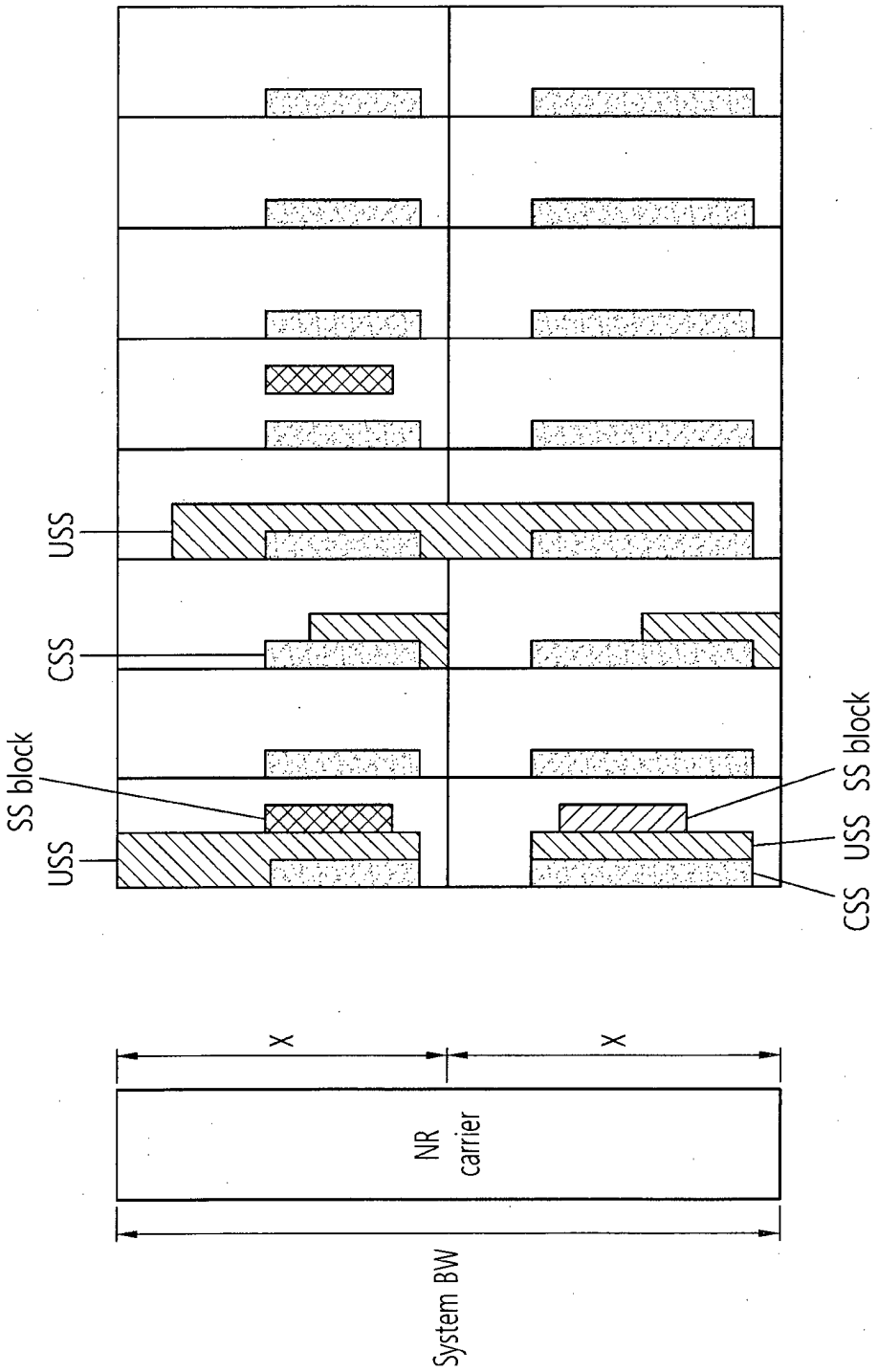
[Fig. 6]


beam4
beam 3
beam 2
beam 1
TRP B
SS block1
SS block2
SS block3
SS block4
beam 4
beam 3
beam 2
beam 1
Msg4
Msg3
RAR
PRACH
SS block1
UE1 with beam 1
SS block2
UE1 with beam 2

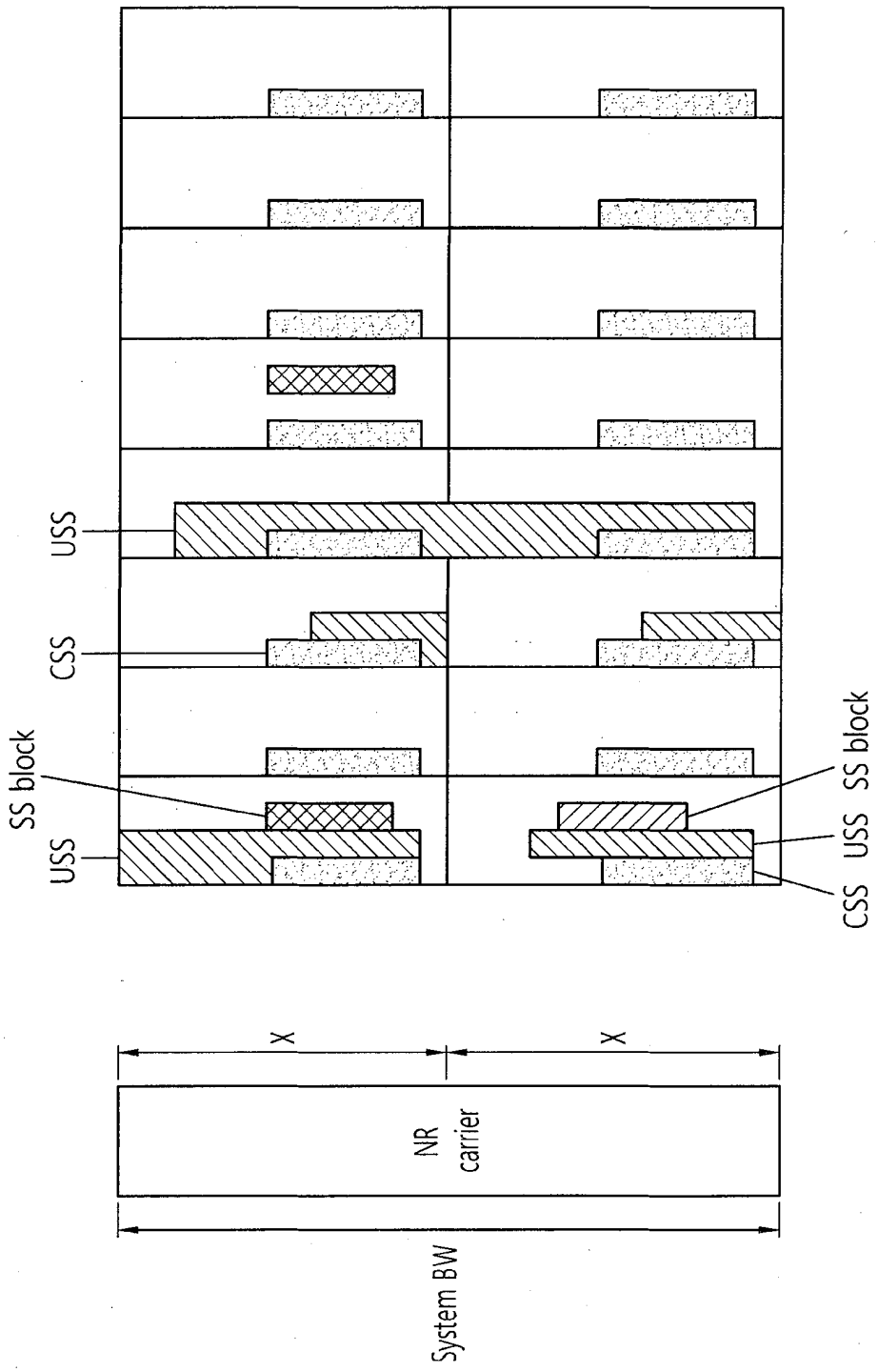
[Fig. 7]


PUCCH
Uplink
Downlink
slot type indicated by GCCC
Uplink
flexible
Downlink
Fallback configuration
PUCCH
Downlink
slot type indicated by GCCC

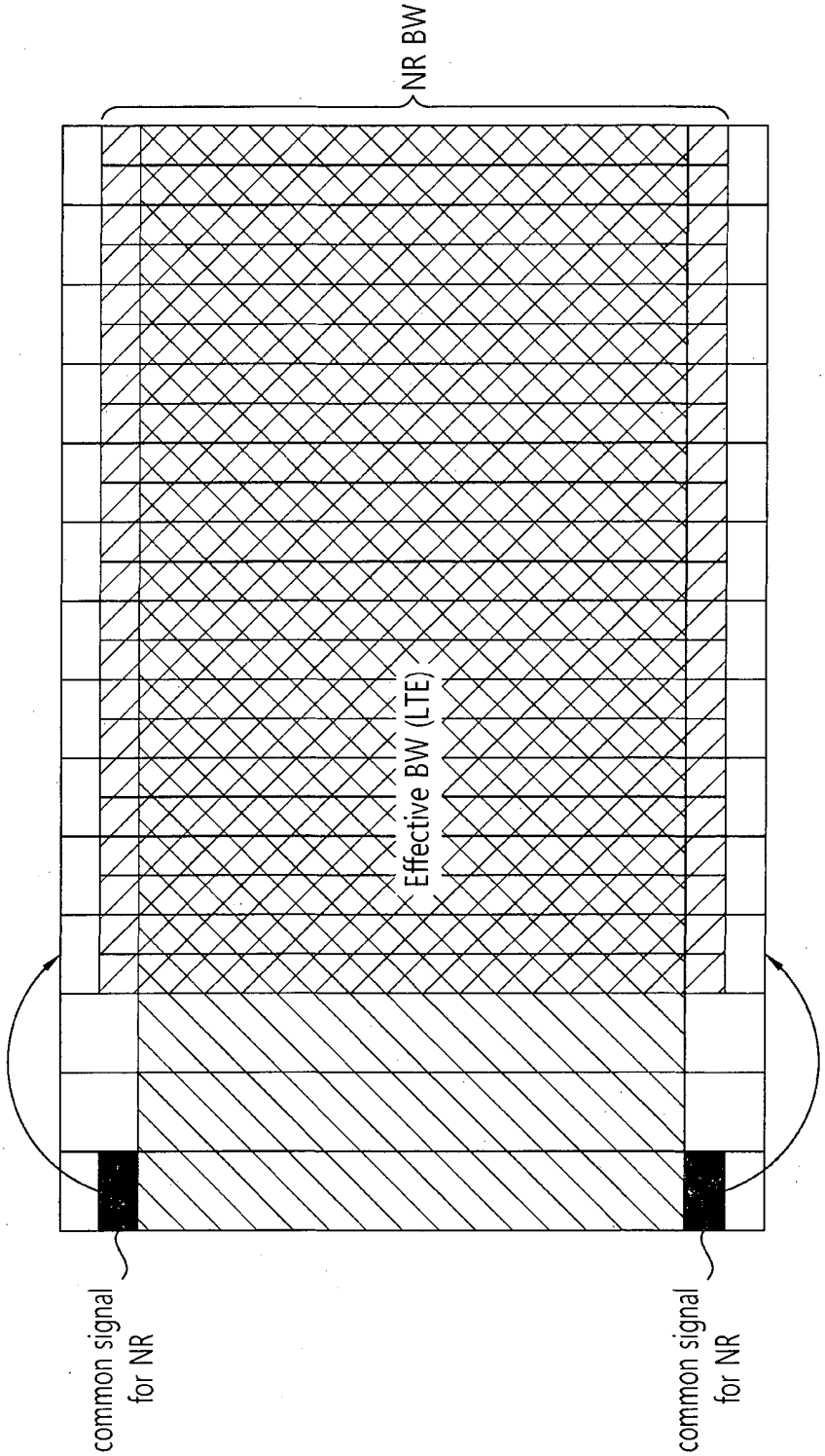
[Fig. 8]



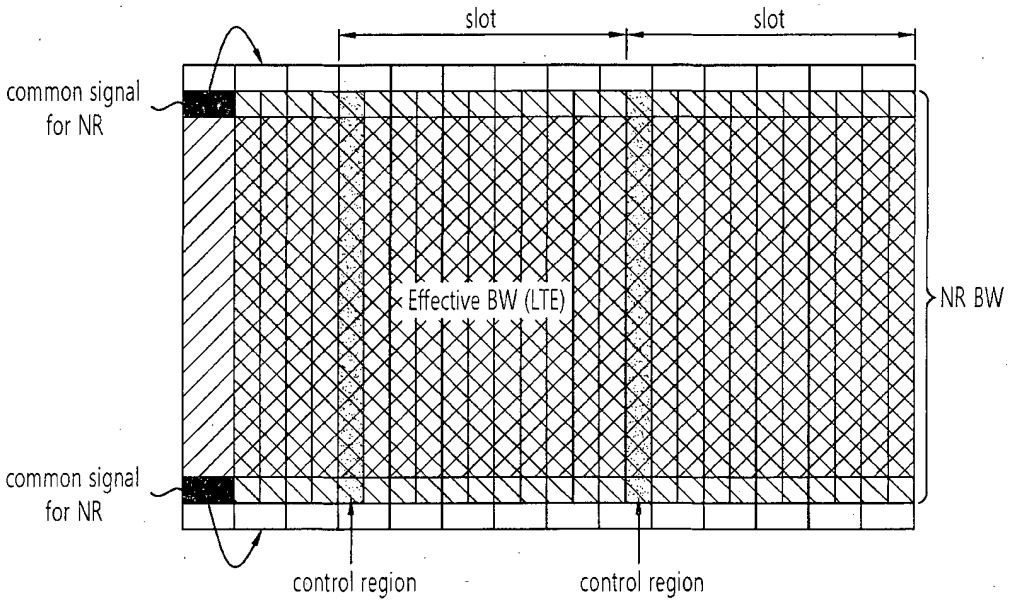
[Fig. 9]



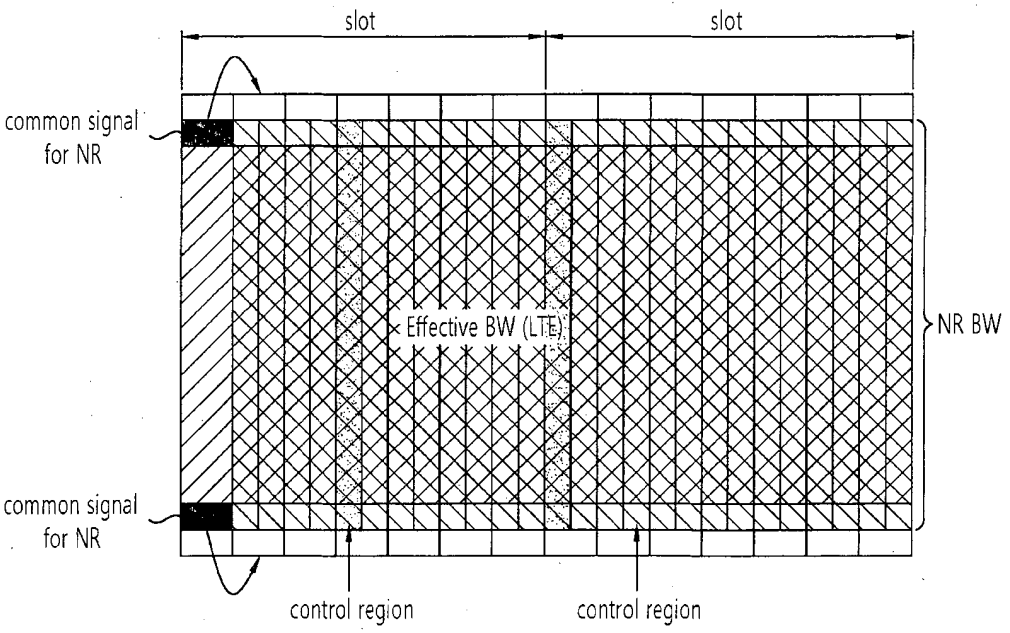
[Fig. 10]


NR BW
Effective BW (LTE)
common signal for NR
common signal for NR

[Fig. 11]

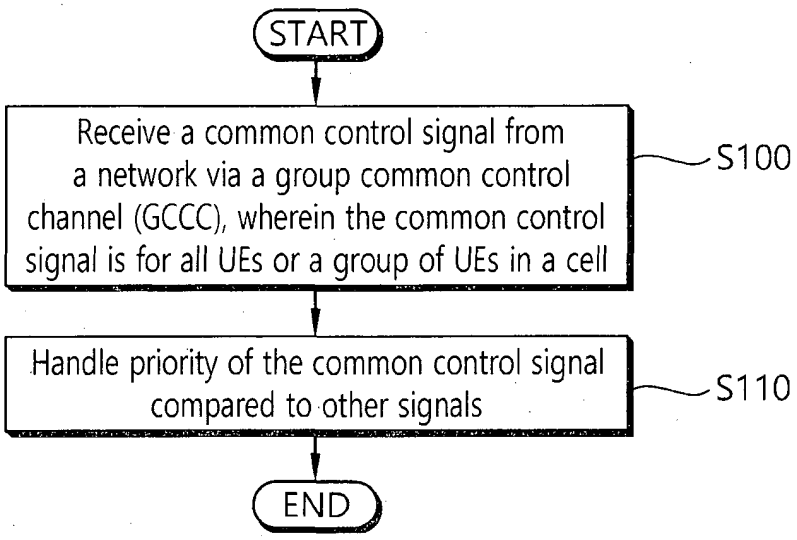

slot
slot
common signal for NR
Effective BW (LTE)
NR BW
common signal for NR
control region
control region

(a)

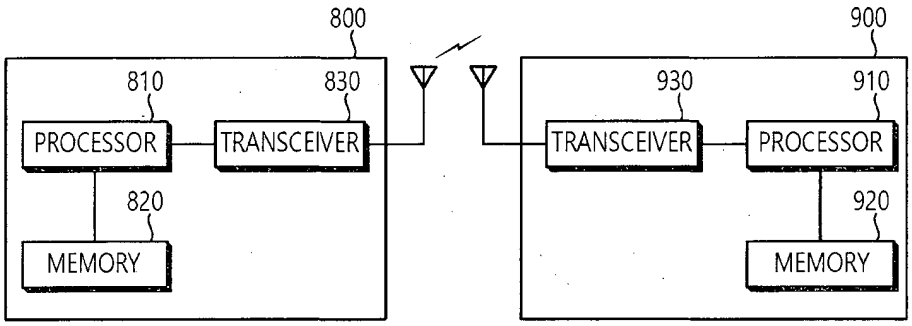

slot
slot
common signal for NR
Effective BW (LTE)
NR BW
common signal for NR
control region
control region

(b)

[Fig. 12]


START
Receive a common control signal from a network via a group common control channel (GCCC), wherein the common control signal is for all UEs or a group of UEs in a cell
S100
Handle priority of the common control signal compared to other signals
S110
END

[Fig. 13]


800
810
PROCESSOR
830
TRANSCEIVER
820
MEMORY
900
930
TRANSCEIVER
910
PROCESSOR
920
MEMORY