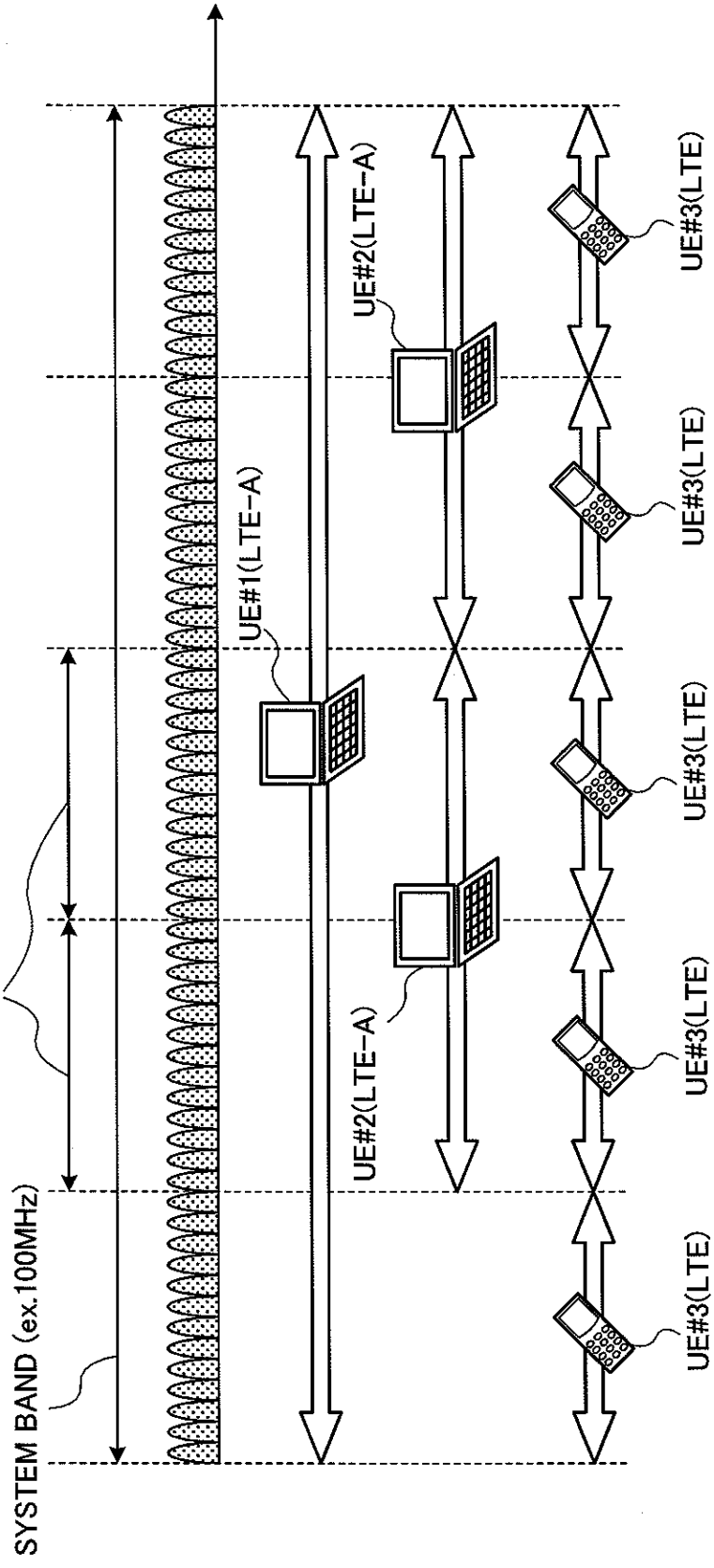

BASE BAND (ex.20MHz): COMPONENT CARRIER (CC)
SYSTEM BAND (ex.100MHz)
UE#1(LTE-A)
UE#2(LTE-A)
UE#2(LTE-A)
UE#3(LTE)
UE#3(LTE)
UE#3(LTE)
UE#3(LTE)
UE#3(LTE)

FIG. 1

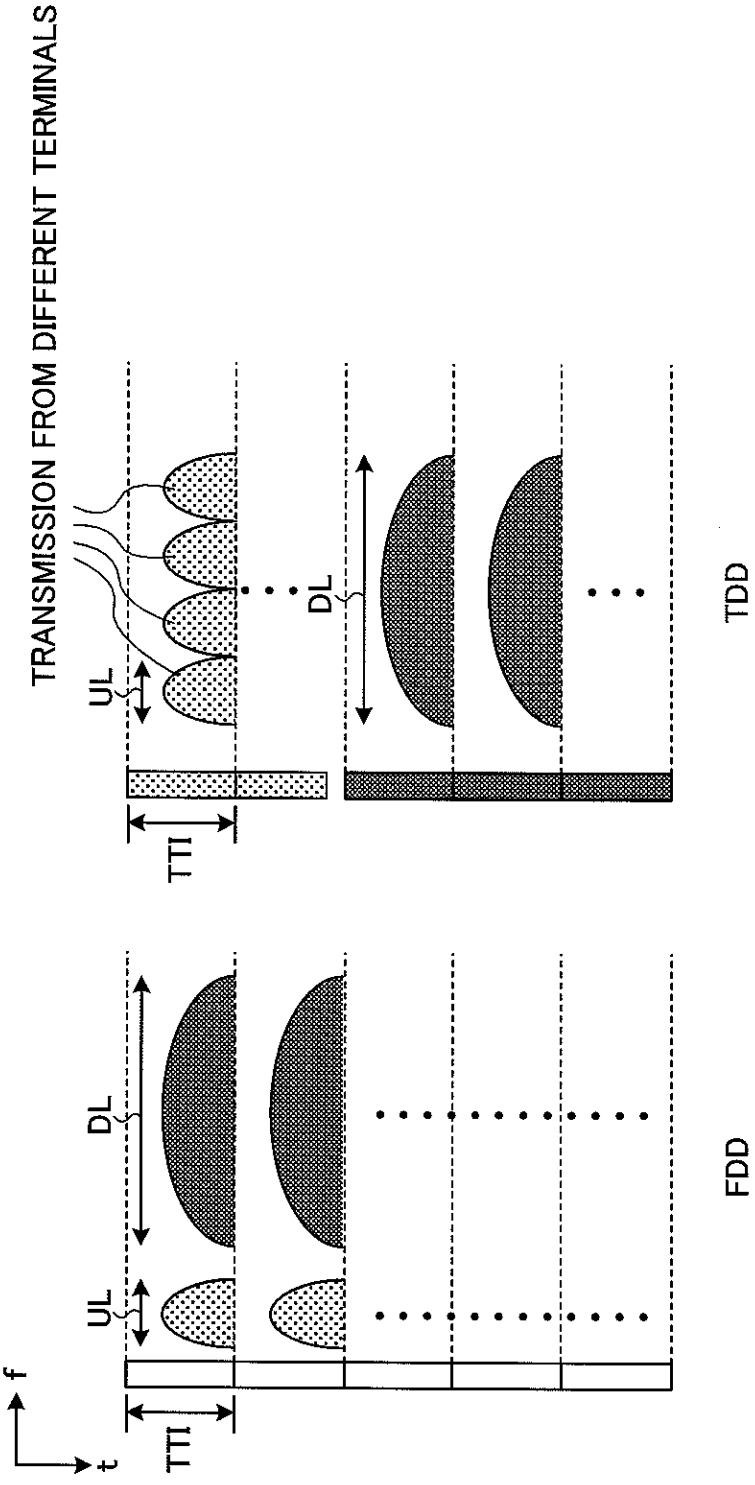

TRANSMISSION FROM DIFFERENT TERMINALS
UL
DL
TTI
TDD
DL
UL
TTI
FDD
f
t

FIG. 2

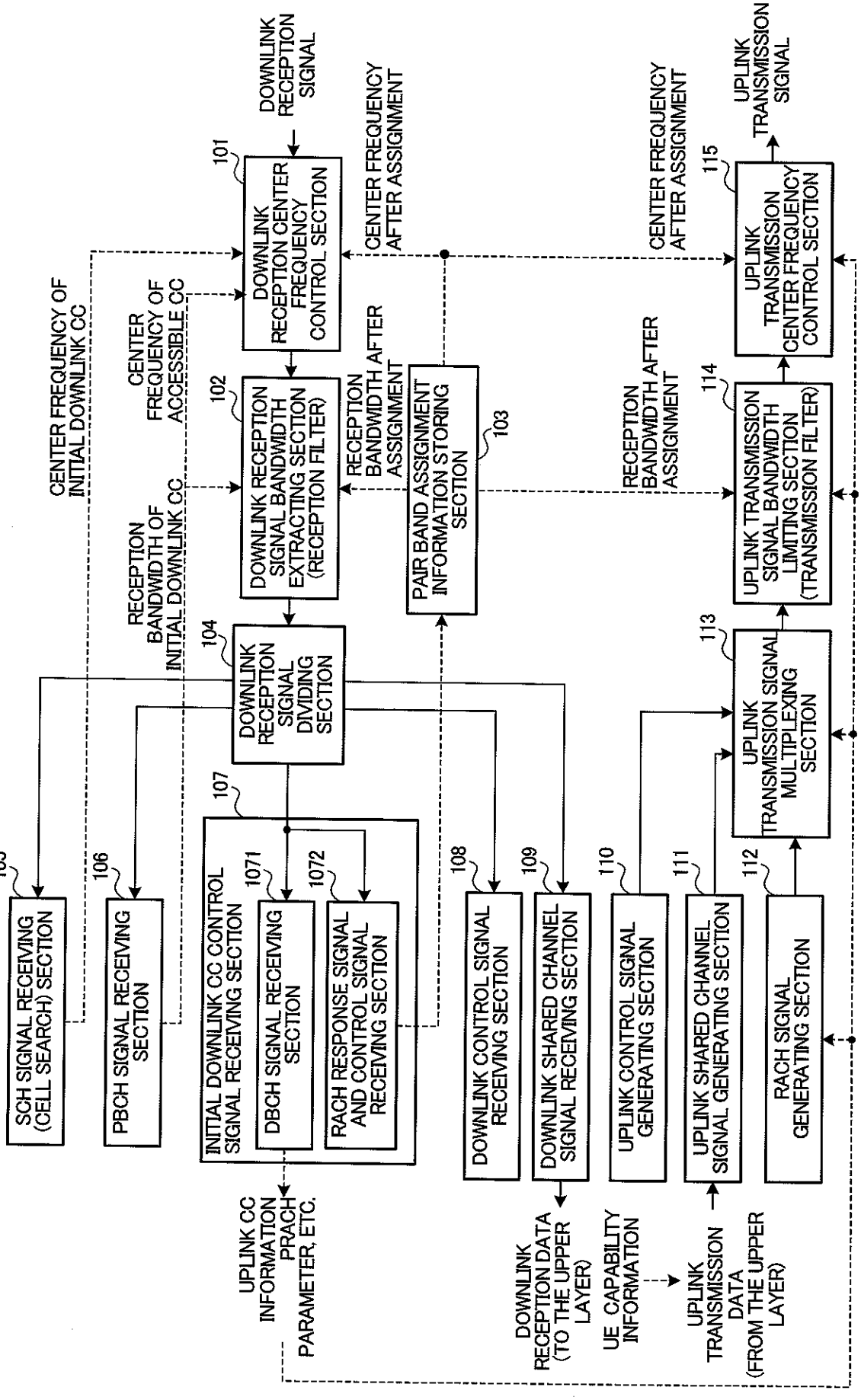

DOWNLINK RECEPTION SIGNAL
101
DOWNLINK RECEPTION CENTER FREQUENCY CONTROL SECTION
CENTER FREQUENCY AFTER ASSIGNMENT
CENTER FREQUENCY OF INITIAL DOWNLINK CC
CENTER FREQUENCY OF ACCESSIBLE CC
102
DOWNLINK RECEPTION SIGNAL BANDWIDTH EXTRACTING SECTION (RECEPTION FILTER)
RECEPTION BANDWIDTH AFTER ASSIGNMENT
103
PAIR BAND ASSIGNMENT INFORMATION STORING SECTION
RECEPTION BANDWIDTH OF INITIAL DOWNLINK CC
104
DOWNLINK RECEPTION SIGNAL DIVIDING SECTION
105
SCH SIGNAL RECEIVING (CELL SEARCH) SECTION
106
PBCH SIGNAL RECEIVING SECTION
107
INITIAL DOWNLINK CC CONTROL SIGNAL RECEIVING SECTION
1071
DBCH SIGNAL RECEIVING SECTION
1072
RACH RESPONSE SIGNAL AND CONTROL SIGNAL RECEIVING SECTION
108
DOWNLINK CONTROL SIGNAL RECEIVING SECTION
109
DOWNLINK SHARED CHANNEL SIGNAL RECEIVING SECTION
110
UPLINK CONTROL SIGNAL GENERATING SECTION
111
UPLINK SHARED CHANNEL SIGNAL GENERATING SECTION
112
RACH SIGNAL GENERATING SECTION
113
UPLINK TRANSMISSION SIGNAL MULTIPLEXING SECTION
114
UPLINK TRANSMISSION SIGNAL BANDWIDTH LIMITING SECTION (TRANSMISSION FILTER)
RECEPTION BANDWIDTH AFTER ASSIGNMENT
115
UPLINK TRANSMISSION CENTER FREQUENCY CONTROL SECTION
CENTER FREQUENCY AFTER ASSIGNMENT
UPLINK TRANSMISSION SIGNAL
UPLINK CC INFORMATION PRACH PARAMETER, ETC.
DOWNLINK RECEPTION DATA (TO THE UPPER LAYER)
UE CAPABILITY INFORMATION
UPLINK TRANSMISSION DATA (FROM THE UPPER LAYER)

FIG. 3

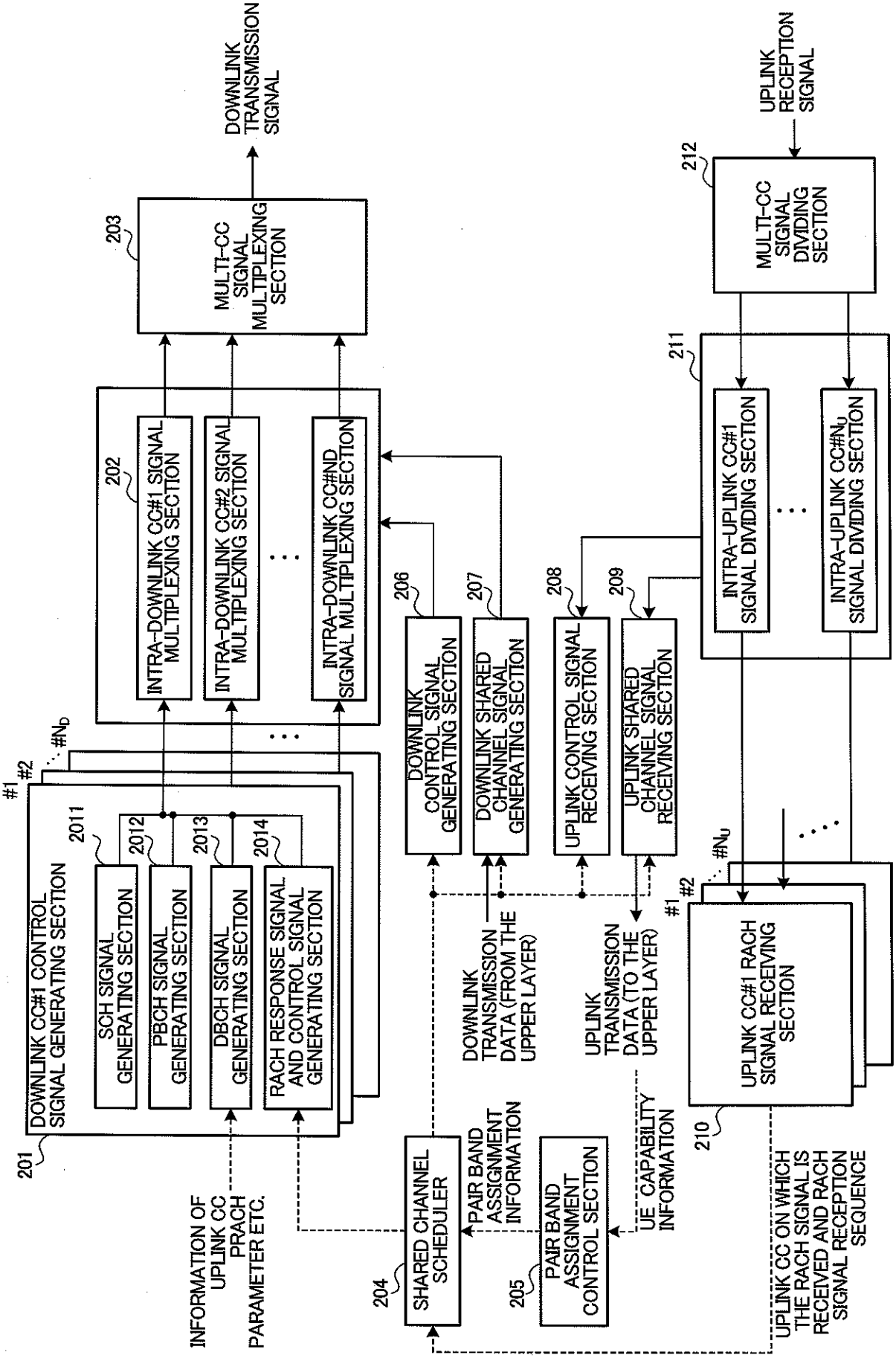

DOWNLINK TRANSMISSION SIGNAL
UPLINK RECEPTION SIGNAL
MULTI-CC SIGNAL MULTIPLEXING SECTION
MULTI-CC SIGNAL DIVIDING SECTION
INTRA-DOWNLINK CC#1 SIGNAL MULTIPLEXING SECTION
INTRA-DOWNLINK CC#2 SIGNAL MULTIPLEXING SECTION
INTRA-DOWNLINK CC#ND SIGNAL MULTIPLEXING SECTION
INTRA-UPLINK CC#1 SIGNAL DIVIDING SECTION
INTRA-UPLINK CC#NU SIGNAL DIVIDING SECTION
DOWNLINK CC#1 CONTROL SIGNAL GENERATING SECTION
SCH SIGNAL GENERATING SECTION
PBCH SIGNAL GENERATING SECTION
DBCH SIGNAL GENERATING SECTION
RACH RESPONSE SIGNAL AND CONTROL SIGNAL GENERATING SECTION
DOWNLINK CONTROL SIGNAL GENERATING SECTION
DOWNLINK SHARED CHANNEL SIGNAL GENERATING SECTION
UPLINK CONTROL SIGNAL RECEIVING SECTION
UPLINK SHARED CHANNEL SIGNAL RECEIVING SECTION
UPLINK CC#1 RACH SIGNAL RECEIVING SECTION
SHARED CHANNEL SCHEDULER
PAIR BAND ASSIGNMENT CONTROL SECTION
INFORMATION OF UPLINK CC PRACH PARAMETER ETC.
PAIR BAND ASSIGNMENT INFORMATION
DOWNLINK TRANSMISSION DATA (FROM THE UPPER LAYER)
UPLINK TRANSMISSION DATA (TO THE UPPER LAYER)
UE CAPABILITY INFORMATION
UPLINK CC ON WHICH THE RACH SIGNAL IS RECEIVED AND RACH SIGNAL RECEPTION SEQUENCE
#1
#2
#ND
#NU
201
202
203
204
205
206
207
208
209
210
211
212
2011
2012
2013
2014

FIG. 4

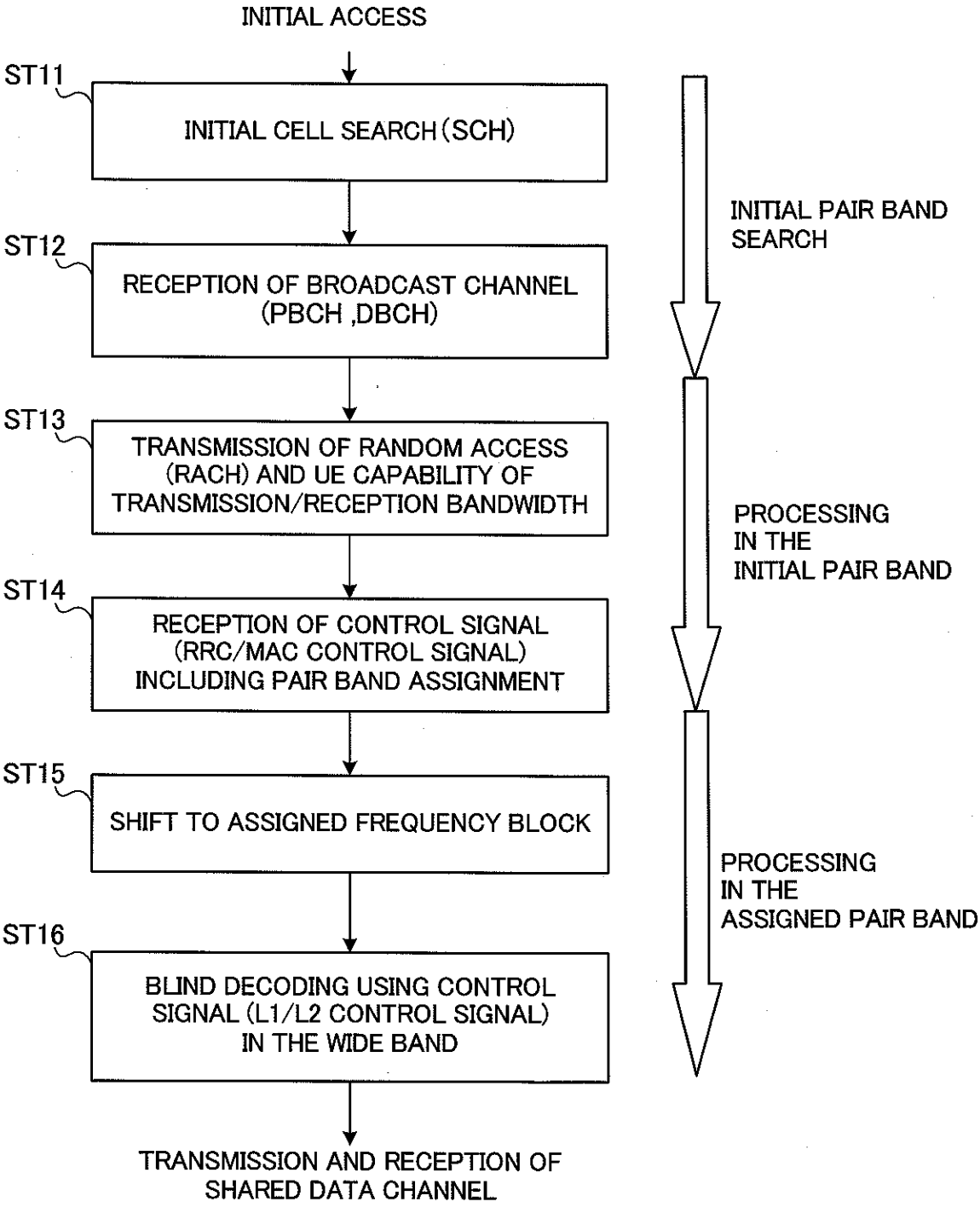

INITIAL ACCESS
ST11
INITIAL CELL SEARCH (SCH)
ST12
RECEPTION OF BROADCAST CHANNEL (PBCH ,DBCH)
ST13
TRANSMISSION OF RANDOM ACCESS (RACH) AND UE CAPABILITY OF TRANSMISSION/RECEPTION BANDWIDTH
ST14
RECEPTION OF CONTROL SIGNAL (RRC/MAC CONTROL SIGNAL) INCLUDING PAIR BAND ASSIGNMENT
ST15
SHIFT TO ASSIGNED FREQUENCY BLOCK
ST16
BLIND DECODING USING CONTROL SIGNAL (L1/L2 CONTROL SIGNAL) IN THE WIDE BAND
TRANSMISSION AND RECEPTION OF SHARED DATA CHANNEL
INITIAL PAIR BAND SEARCH
PROCESSING IN THE INITIAL PAIR BAND
PROCESSING IN THE ASSIGNED PAIR BAND

FIG. 5

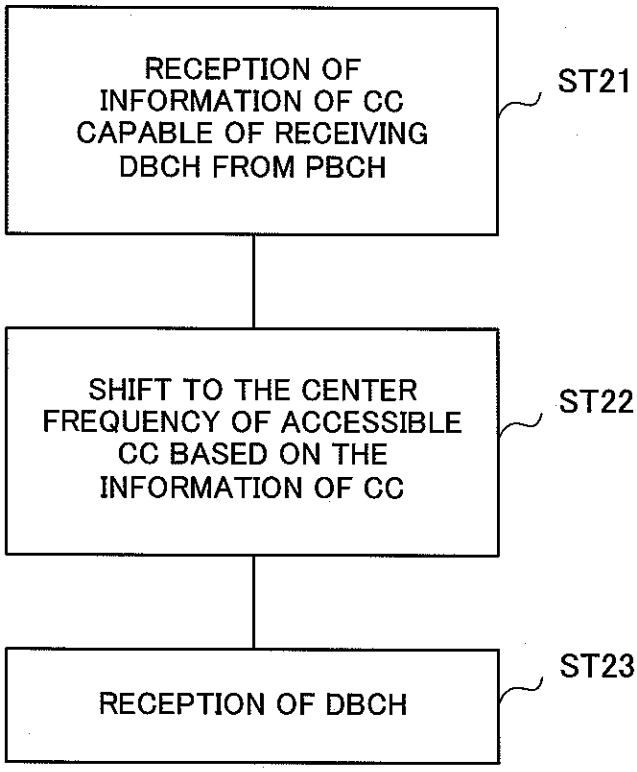

RECEPTION OF INFORMATION OF CC CAPABLE OF RECEIVING DBCH FROM PBCH
ST21
SHIFT TO THE CENTER FREQUENCY OF ACCESSIBLE CC BASED ON THE INFORMATION OF CC
ST22
RECEPTION OF DBCH
ST23

FIG. 6

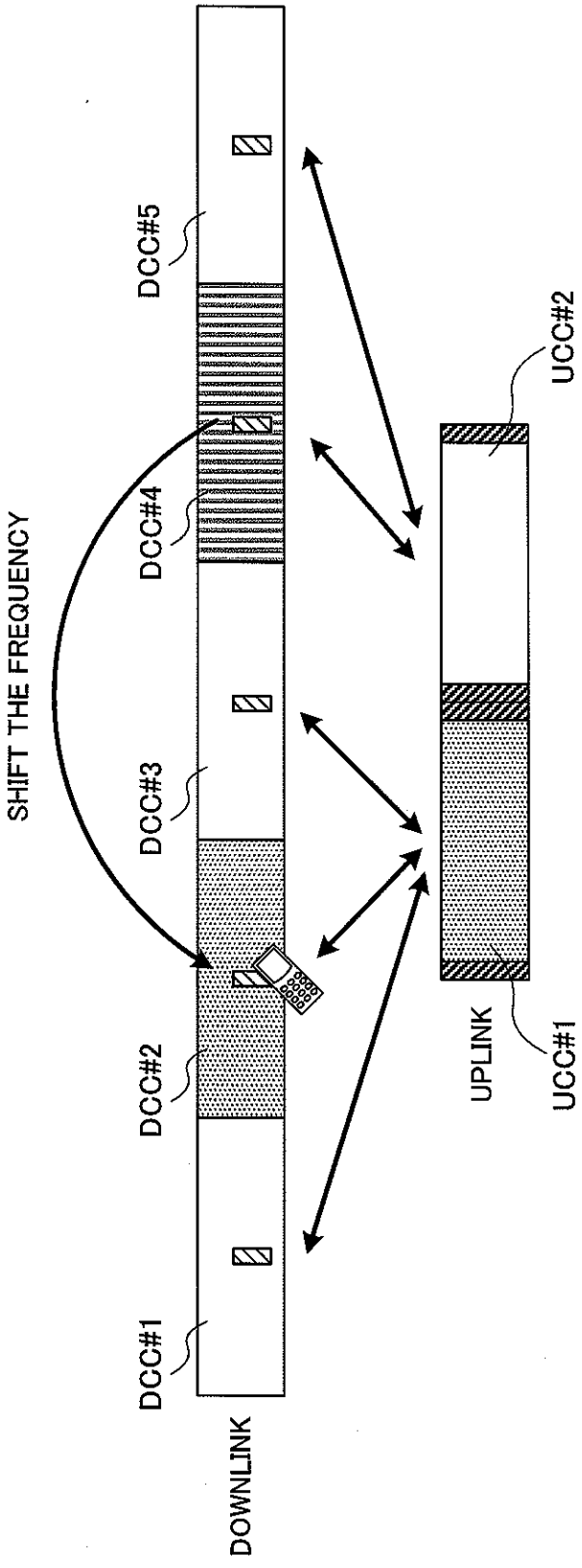

DCC#5
DCC#4
DCC#3
DCC#2
DCC#1
DOWNLINK
SHIFT THE FREQUENCY
UCC#2
UCC#1
UPLINK

FIG. 7

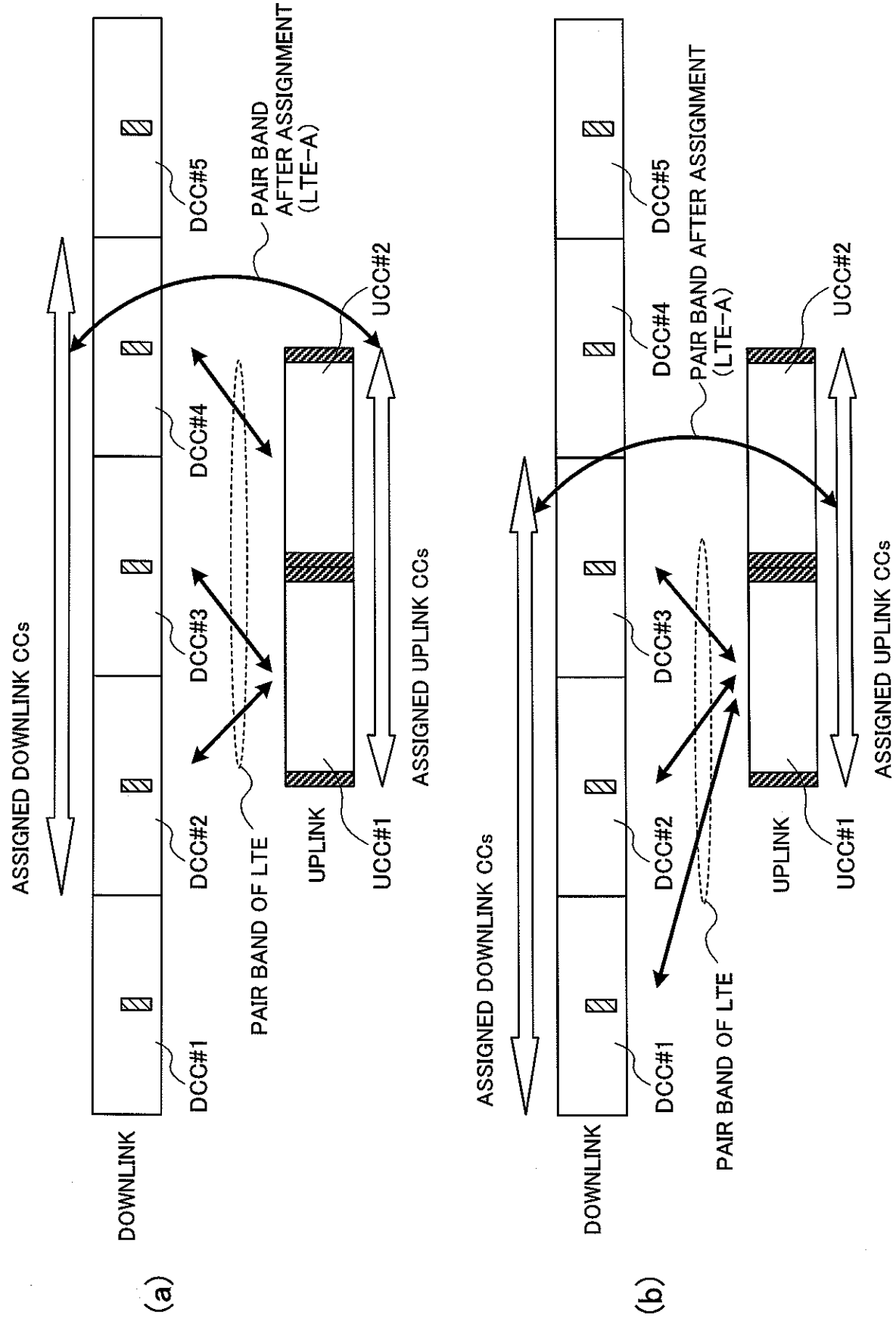

(a)
DOWNLINK
ASSIGNED DOWNLINK CCs
DCC#1
DCC#2
DCC#3
DCC#4
DCC#5
PAIR BAND OF LTE
PAIR BAND AFTER ASSIGNMENT (LTE-A)
UPLINK
UCC#1
UCC#2
ASSIGNED UPLINK CCs
(b)
DOWNLINK
ASSIGNED DOWNLINK CCs
DCC#1
DCC#2
DCC#3
DCC#4
DCC#5
PAIR BAND OF LTE
PAIR BAND AFTER ASSIGNMENT (LTE-A)
UPLINK
UCC#1
UCC#2
ASSIGNED UPLINK CCs

FIG. 8

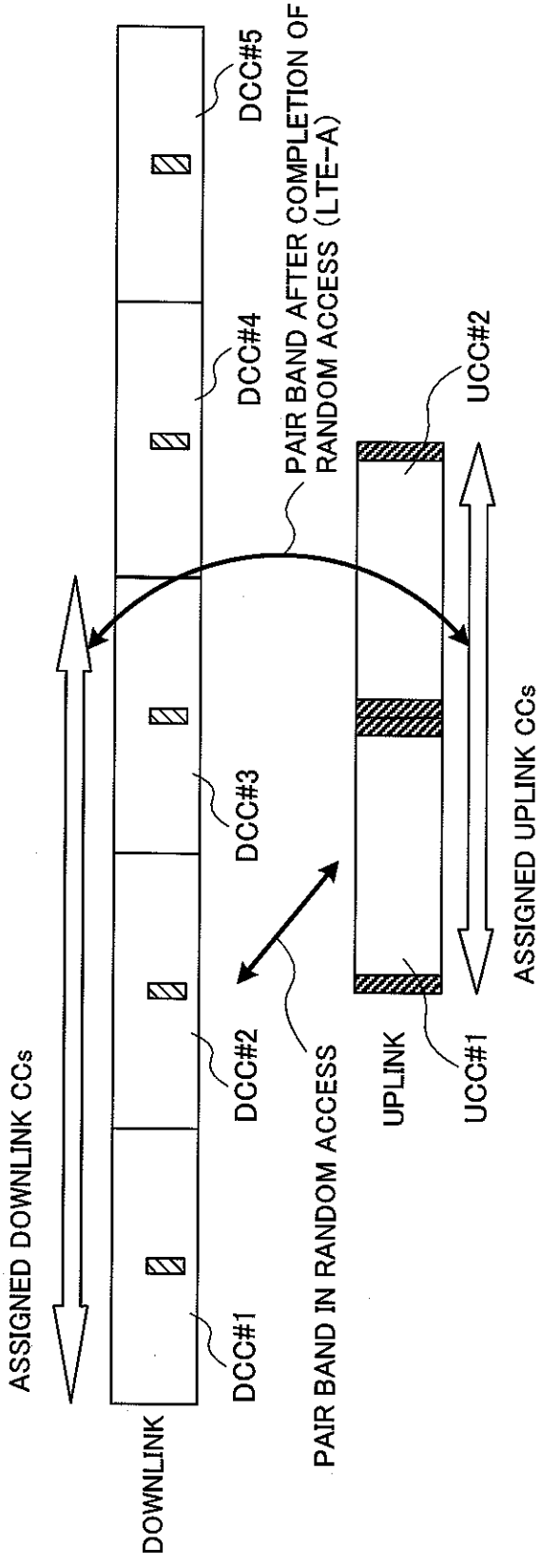

DOWNLINK
UPLINK
ASSIGNED DOWNLINK CCs
ASSIGNED UPLINK CCs
DCC#1
DCC#2
DCC#3
DCC#4
DCC#5
UCC#1
UCC#2
PAIR BAND IN RANDOM ACCESS
PAIR BAND AFTER COMPLETION OF RANDOM ACCESS (LTE-A)

FIG. 9

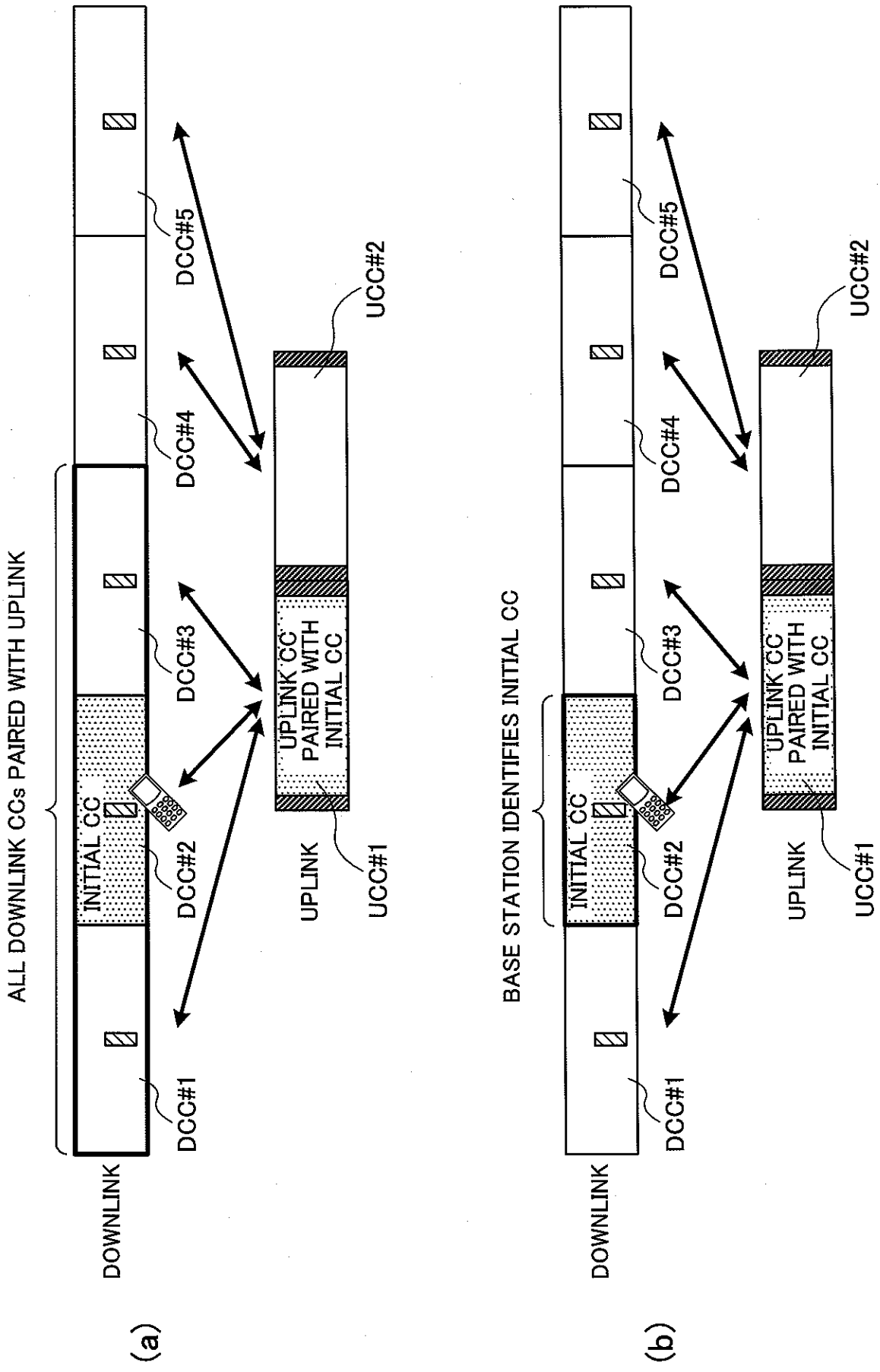

(a)
ALL DOWNLINK CCs PAIRED WITH UPLINK
DOWNLINK
INITIAL CC
DCC#1
DCC#2
DCC#3
DCC#4
DCC#5
UPLINK
UPLINK CC PAIRED WITH INITIAL CC
UCC#1
UCC#2
(b)
BASE STATION IDENTIFIES INITIAL CC
DOWNLINK
INITIAL CC
DCC#1
DCC#2
DCC#3
DCC#4
DCC#5
UPLINK
UPLINK CC PAIRED WITH INITIAL CC
UCC#1
UCC#2

FIG. 10