FIG.1

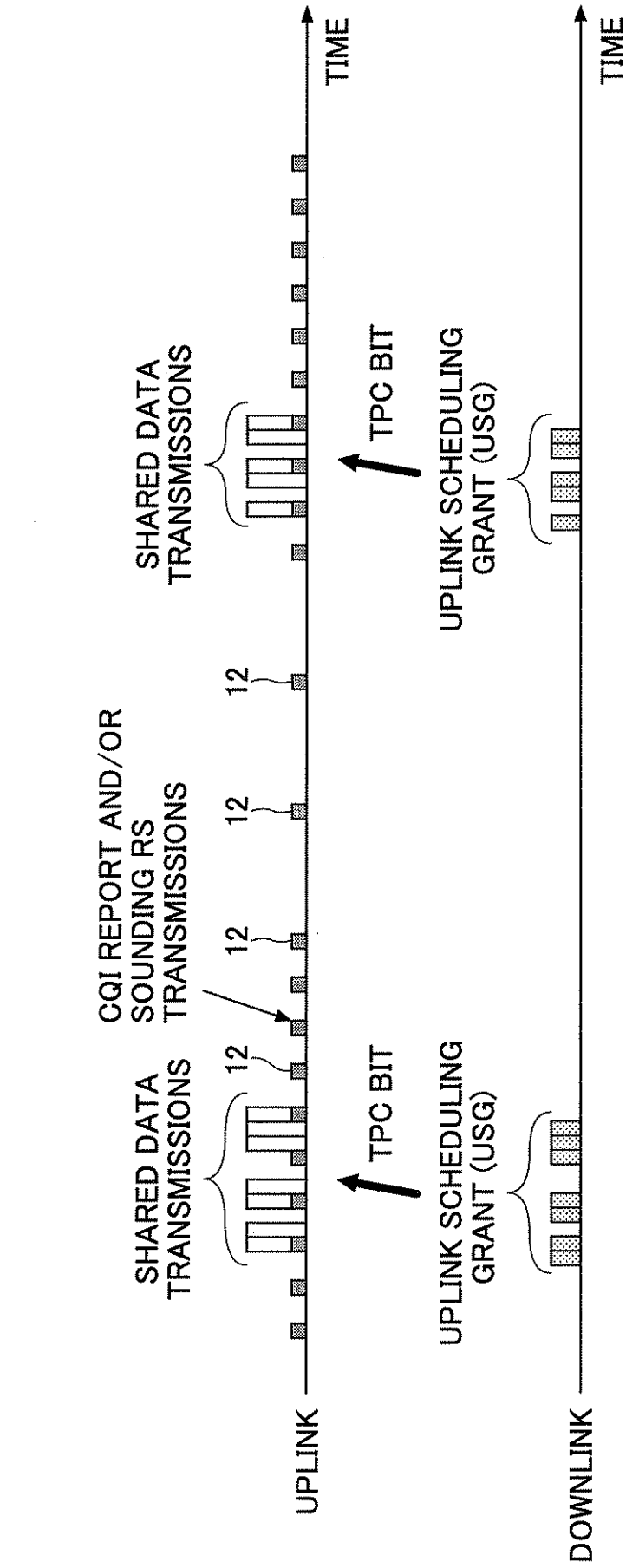

UPLINK
TIME
SHARED DATA TRANSMISSIONS
12
CQI REPORT AND/OR SOUNDING RS TRANSMISSIONS
12
12
12
TPC BIT
UPLINK SCHEDULING GRANT (USG)
SHARED DATA TRANSMISSIONS
TPC BIT
UPLINK SCHEDULING GRANT (USG)
DOWNLINK
TIME

FIG.2

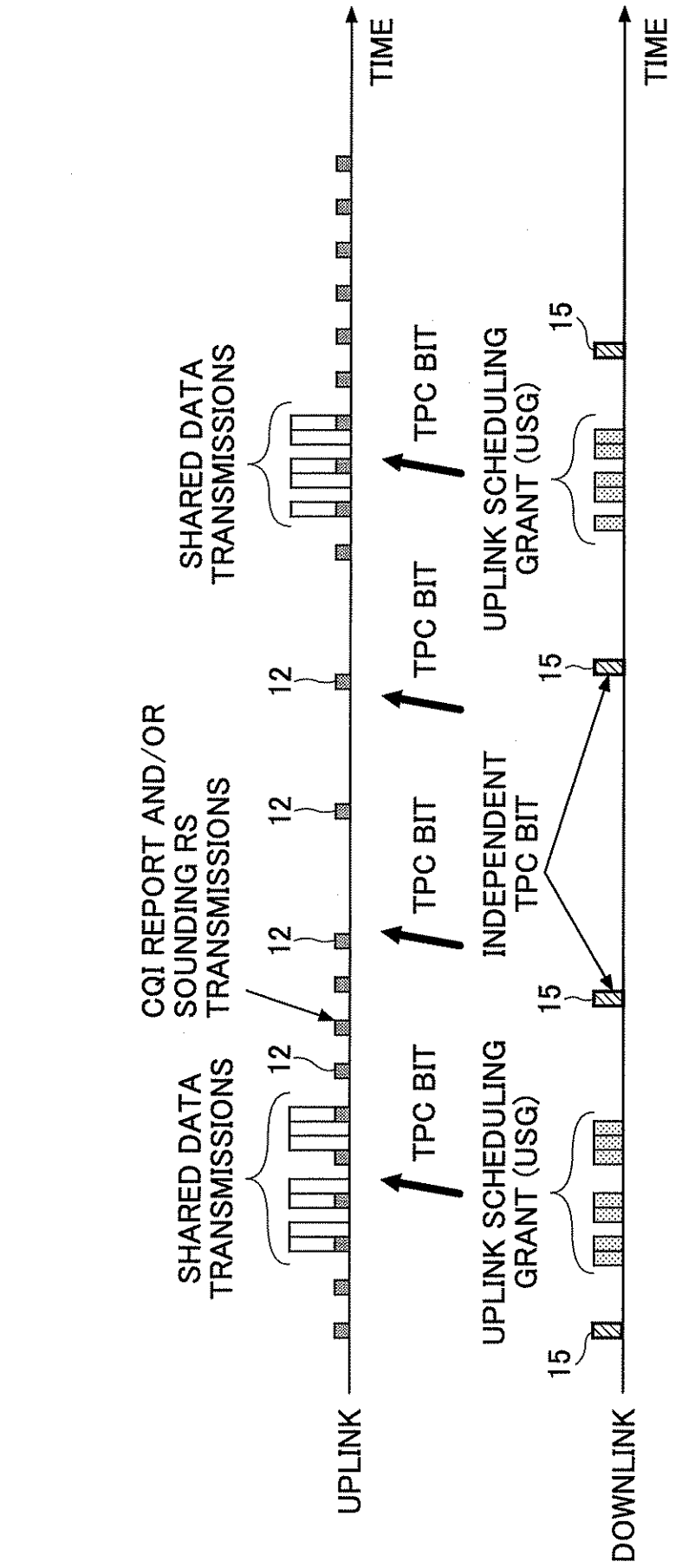

UPLINK
DOWNLINK
TIME
TIME
SHARED DATA TRANSMISSIONS
CQI REPORT AND/OR SOUNDING RS TRANSMISSIONS
SHARED DATA TRANSMISSIONS
UPLINK SCHEDULING GRANT (USG)
INDEPENDENT TPC BIT
UPLINK SCHEDULING GRANT (USG)
TPC BIT
TPC BIT
TPC BIT
TPC BIT
12
12
12
12
15
15
15
15

FIG.3A

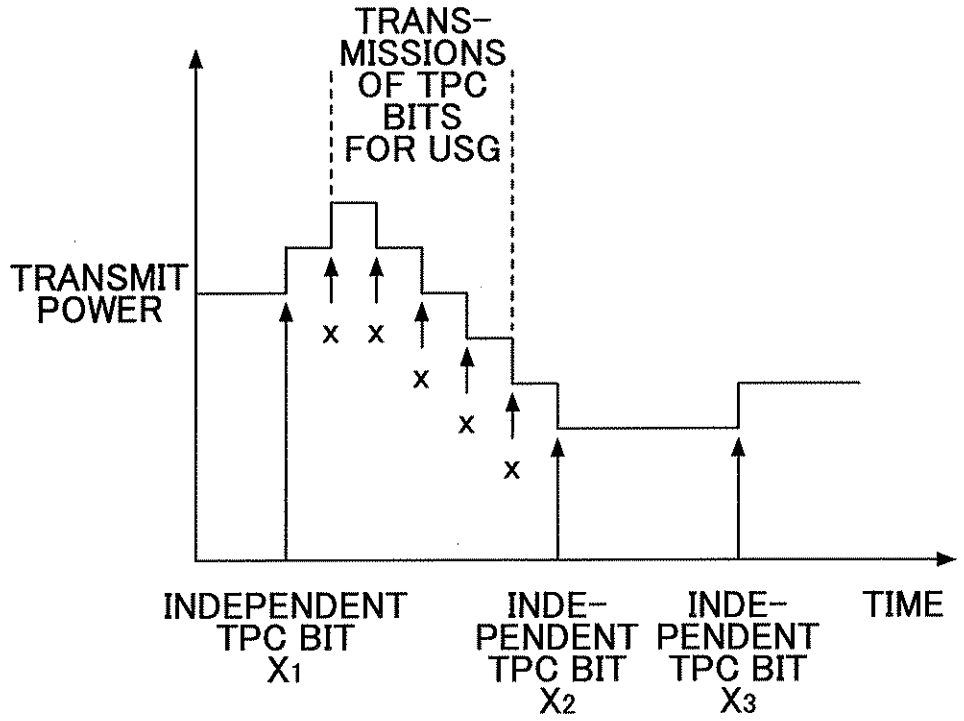

TRANS-
MISSIONS
OF TPC
BITS
FOR USG
TRANSMIT
POWER
INDEPENDENT
TPC BIT
X1
INDE-
PENDENT
TPC BIT
X2
INDE-
PENDENT
TPC BIT
X3
TIME

FIG.3B

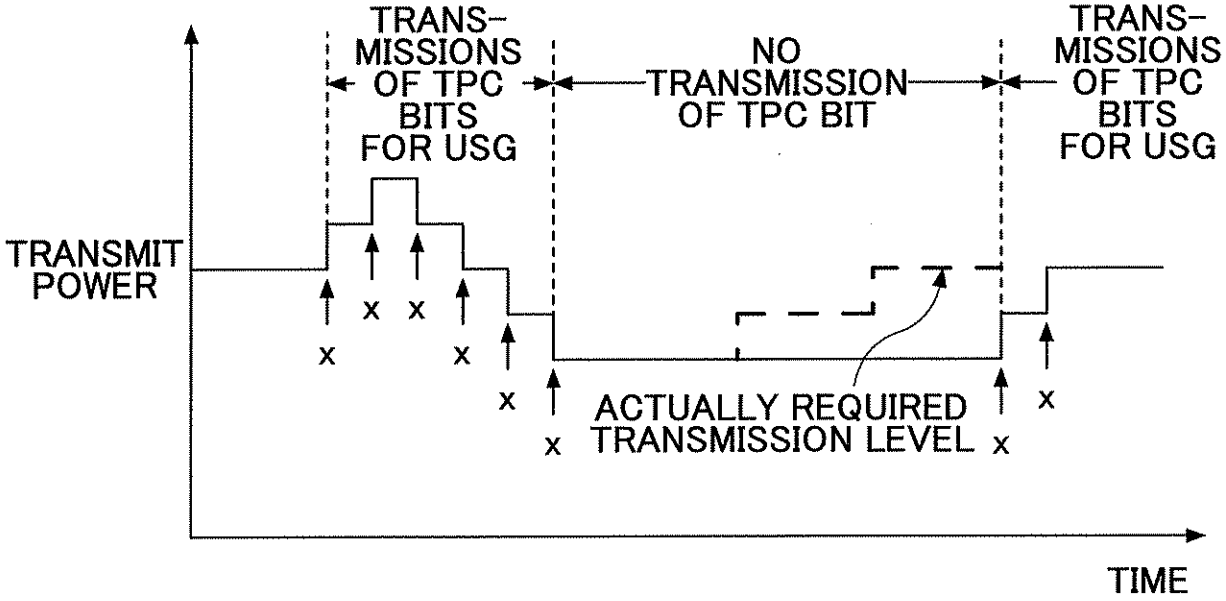

TRANS-
MISSIONS
OF TPC
BITS
FOR USG
NO
TRANSMISSION
OF TPC BIT
TRANS-
MISSIONS
OF TPC
BITS
FOR USG
TRANSMIT
POWER
ACTUALLY REQUIRED
TRANSMISSION LEVEL
TIME

FIG.4A

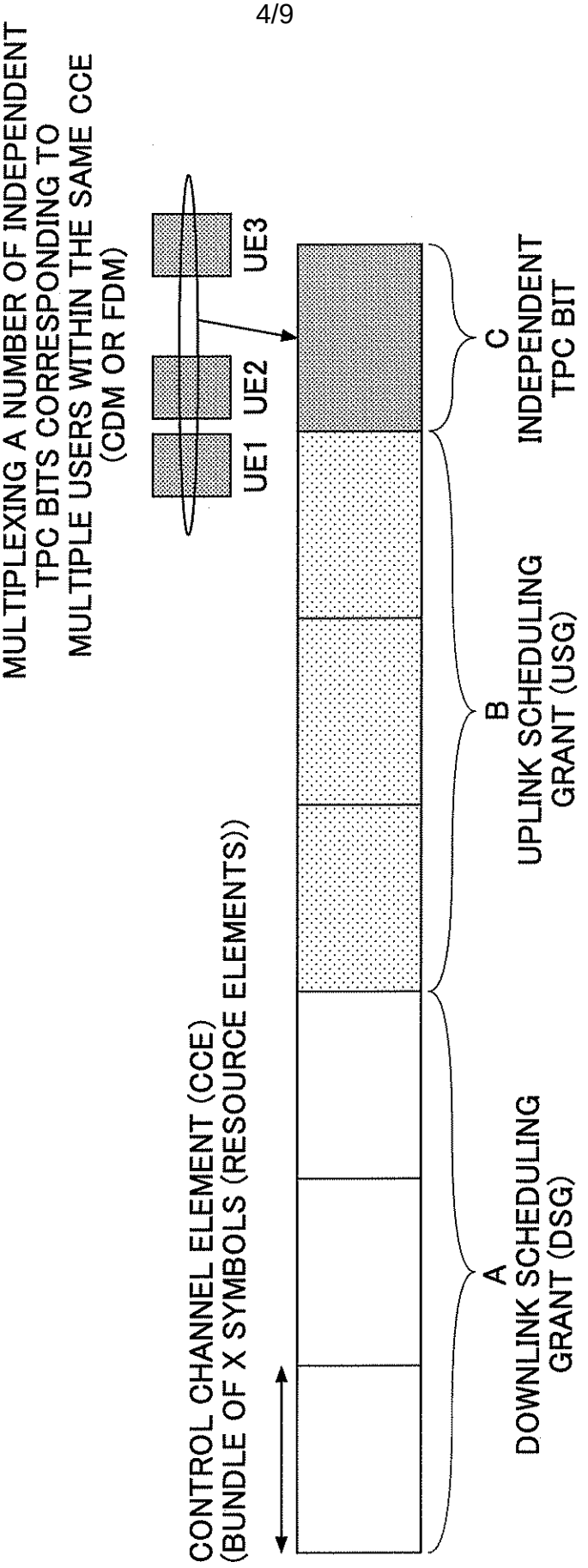

MULTIPLEXING A NUMBER OF INDEPENDENT TPC BITS CORRESPONDING TO MULTIPLE USERS WITHIN THE SAME CCE (CDM OR FDM)
UE1
UE2
UE3
CONTROL CHANNEL ELEMENT (CCE) (BUNDLE OF X SYMBOLS (RESOURCE ELEMENTS))
A DOWNLINK SCHEDULING GRANT (DSG)
B UPLINK SCHEDULING GRANT (USG)
C INDEPENDENT TPC BIT

FIG.4B

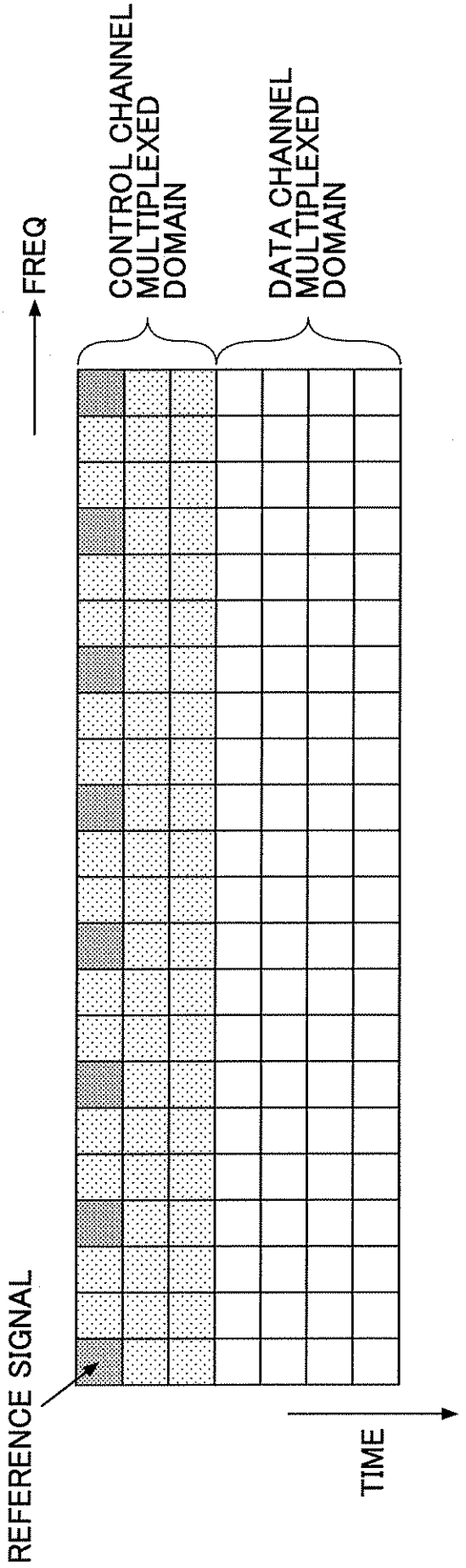

FREQ
CONTROL CHANNEL MULTIPLEXED DOMAIN
DATA CHANNEL MULTIPLEXED DOMAIN
REFERENCE SIGNAL
TIME

FIG.5

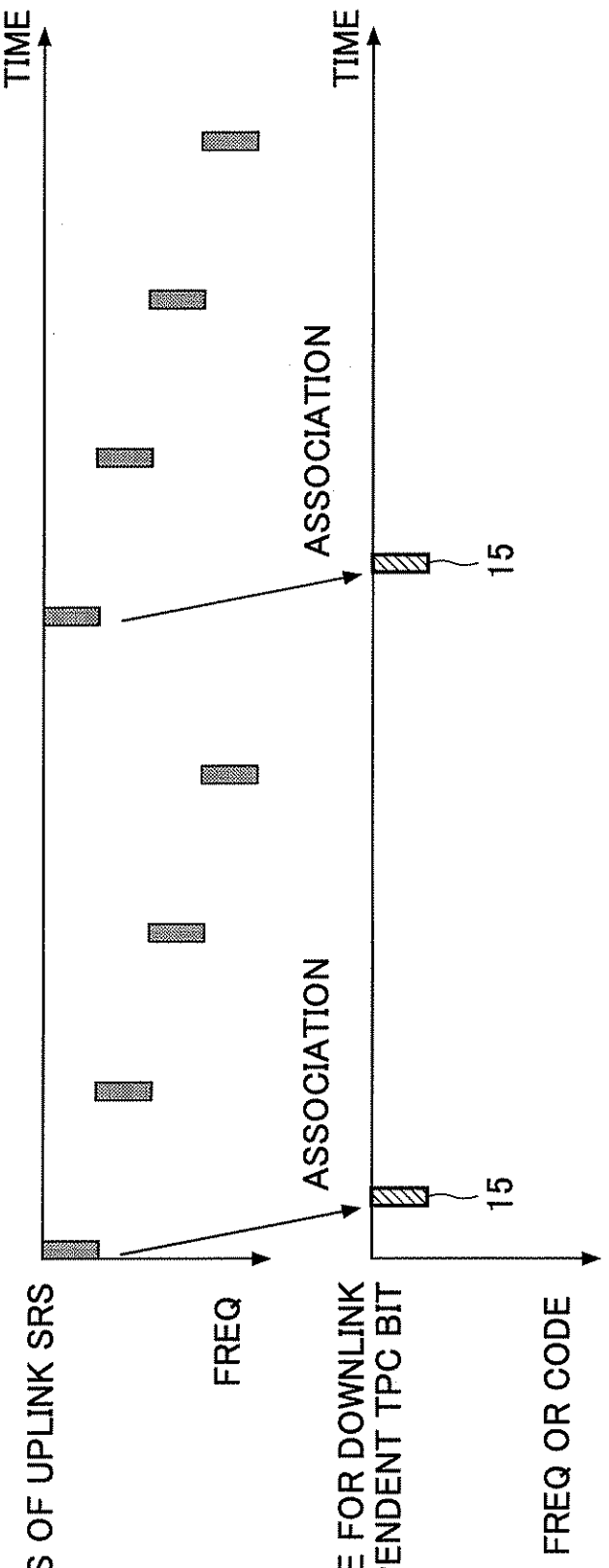

TIME
TIME
ASSOCIATION
ASSOCIATION
15
15
TRANSMISSIONS OF UPLINK SRS
FREQ
RADIO RESOURCE FOR DOWNLINK INDEPENDENT TPC BIT
FREQ OR CODE

FIG.6

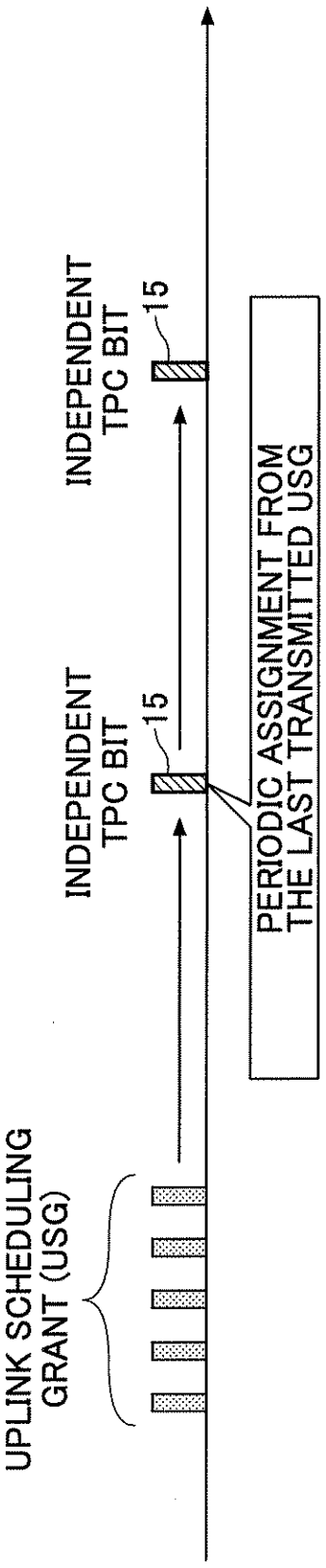

UPLINK SCHEDULING GRANT (USG)
INDEPENDENT TPC BIT
15
INDEPENDENT TPC BIT
15
PERIODIC ASSIGNMENT FROM THE LAST TRANSMITTED USG

FIG.7

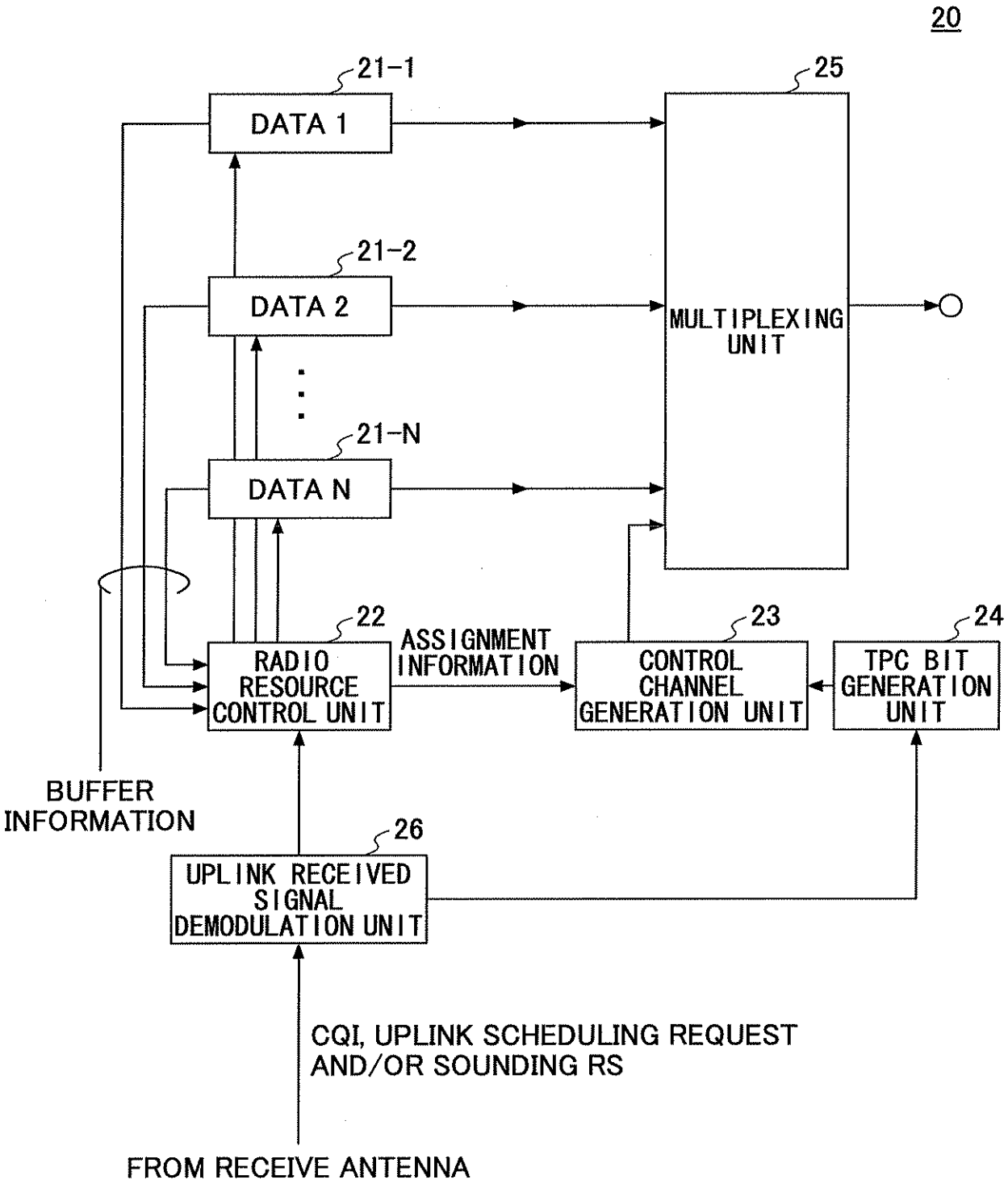
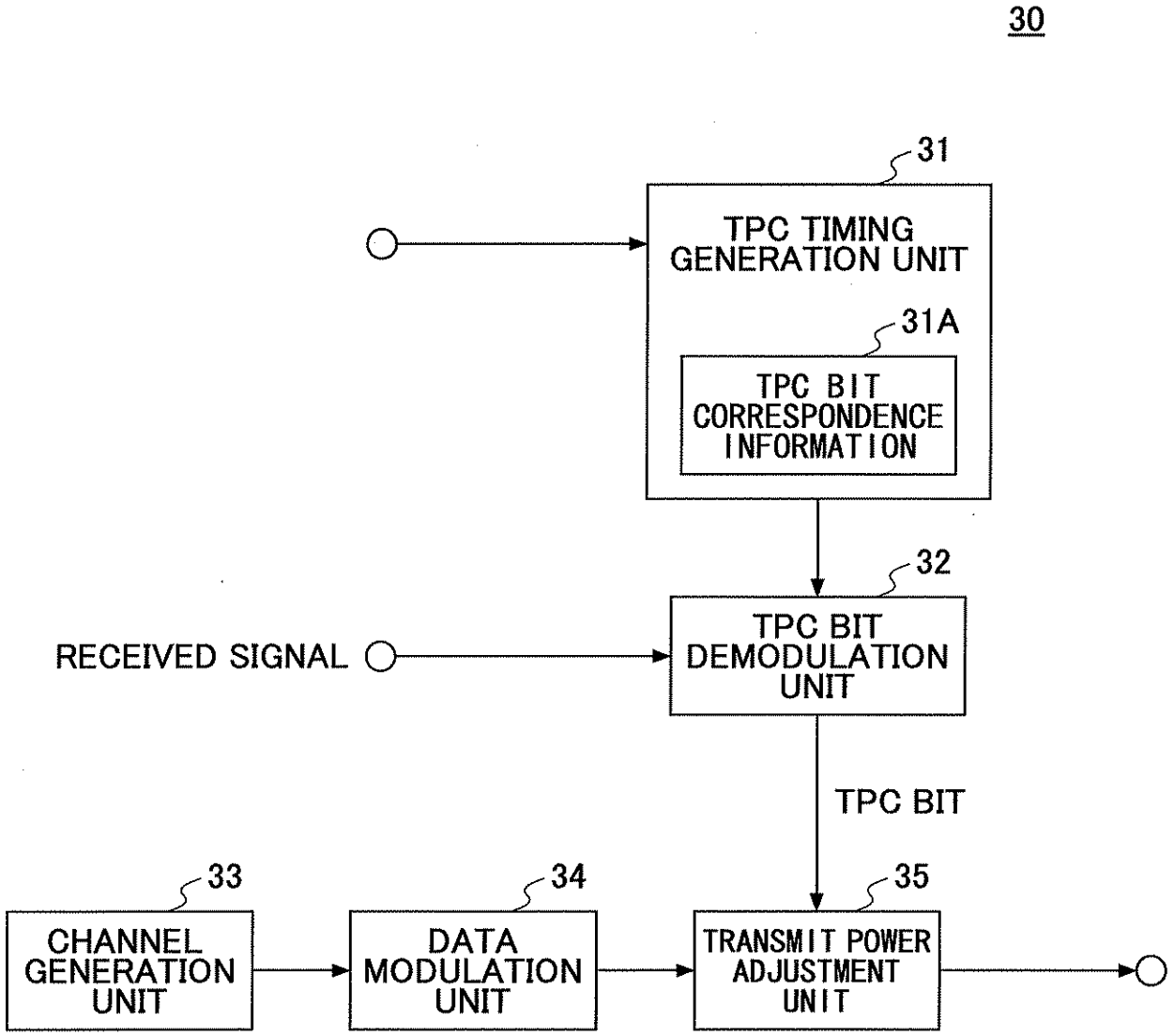

20
21-1
DATA 1
25
21-2
DATA 2
MULTIPLEXING UNIT
21-N
DATA N
22
RADIO RESOURCE CONTROL UNIT
ASSIGNMENT INFORMATION
23
CONTROL CHANNEL GENERATION UNIT
24
TPC BIT GENERATION UNIT
BUFFER INFORMATION
26
UPLINK RECEIVED SIGNAL DEMODULATION UNIT
CQI, UPLINK SCHEDULING REQUEST AND/OR SOUNDING RS
FROM RECEIVE ANTENNA

FIG.8


30
31
TPC TIMING GENERATION UNIT
31A
TPC BIT CORRESPONDENCE INFORMATION
32
TPC BIT DEMODULATION UNIT
RECEIVED SIGNAL
TPC BIT
33
CHANNEL GENERATION UNIT
34
DATA MODULATION UNIT
35
TRANSMIT POWER ADJUSTMENT UNIT