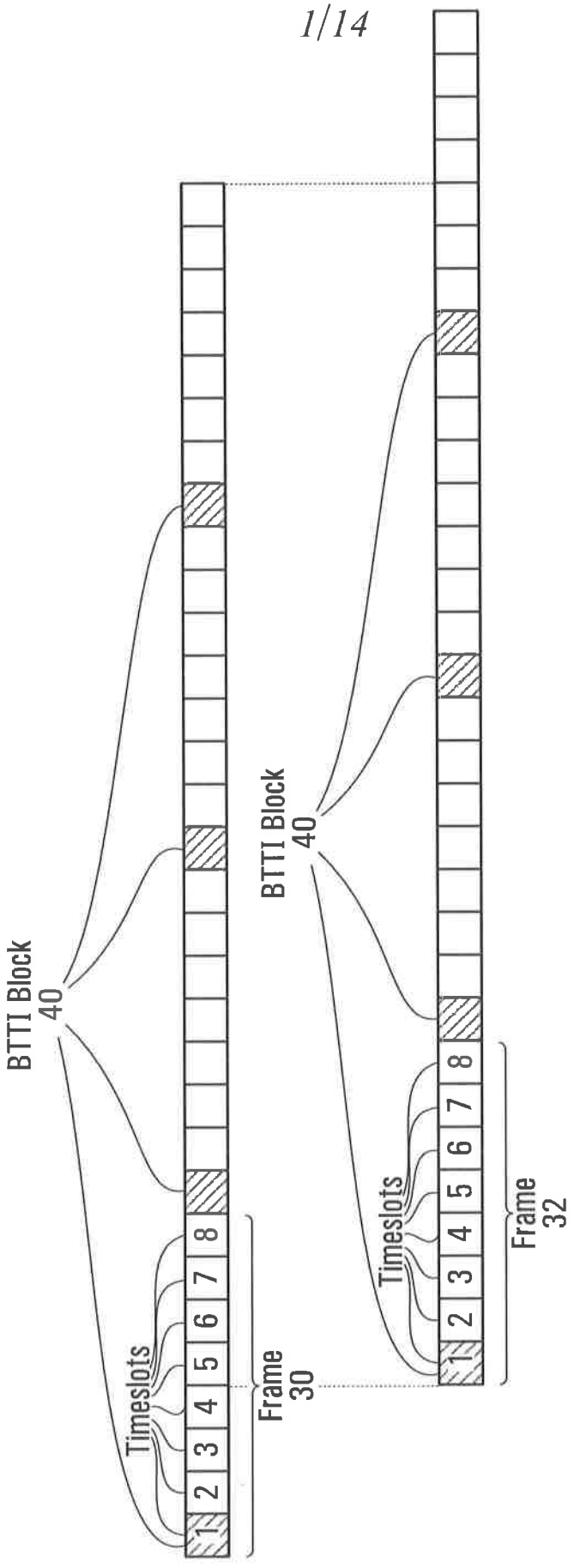

BTTI Block
40
Timeslots
1
2
3
4
5
6
7
8
Frame
30
BTTI Block
40
Timeslots
1
2
3
4
5
6
7
8
Frame
32

FIG. 1A

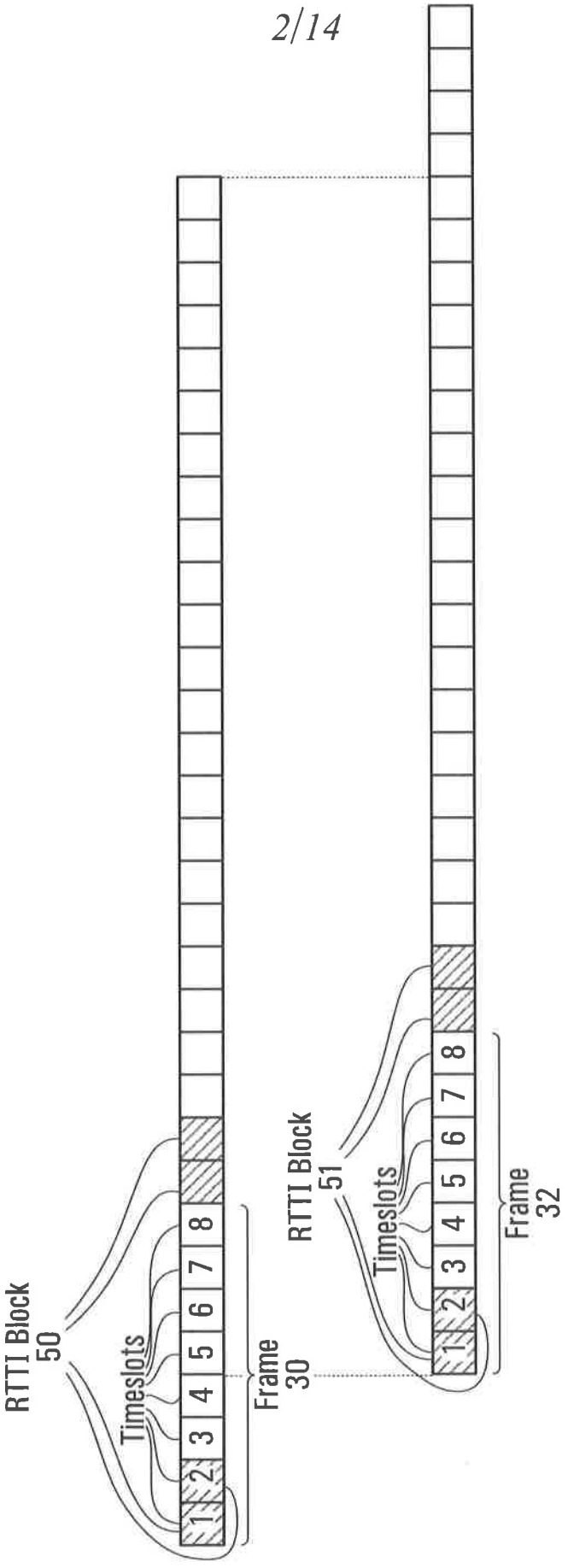

RTTI Block
50
Timeslots
1
2
3
4
5
6
7
8
Frame
30
RTTI Block
51
Timeslots
1
2
3
4
5
6
7
8
Frame
32

FIG. 1B

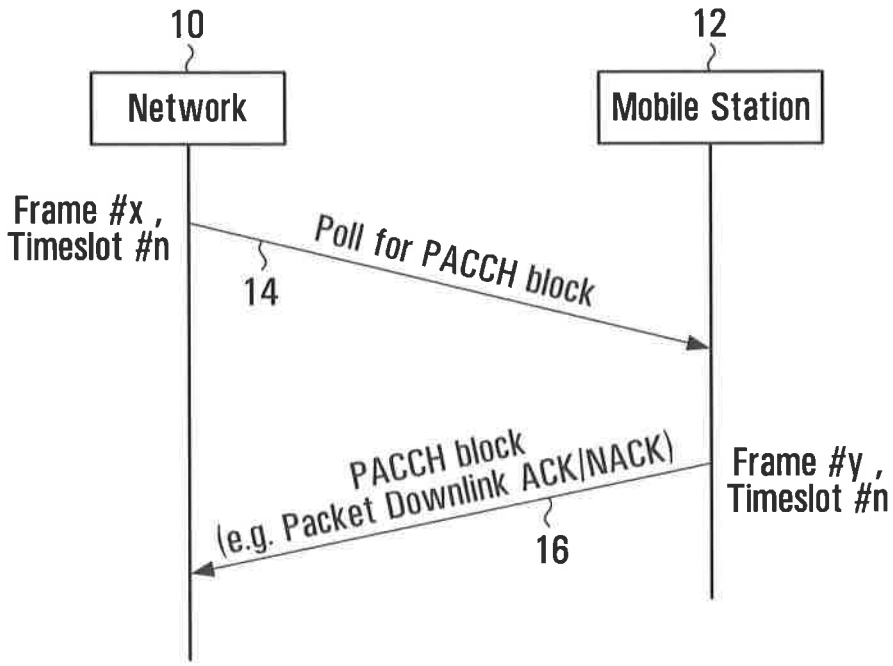

10
12
Network
Mobile Station
Frame #x ,
Timeslot #n
Poll for PACCH block
14
PACCH block
(e.g. Packet Downlink ACK/NACK)
16
Frame #y ,
Timeslot #n

FIG. 2

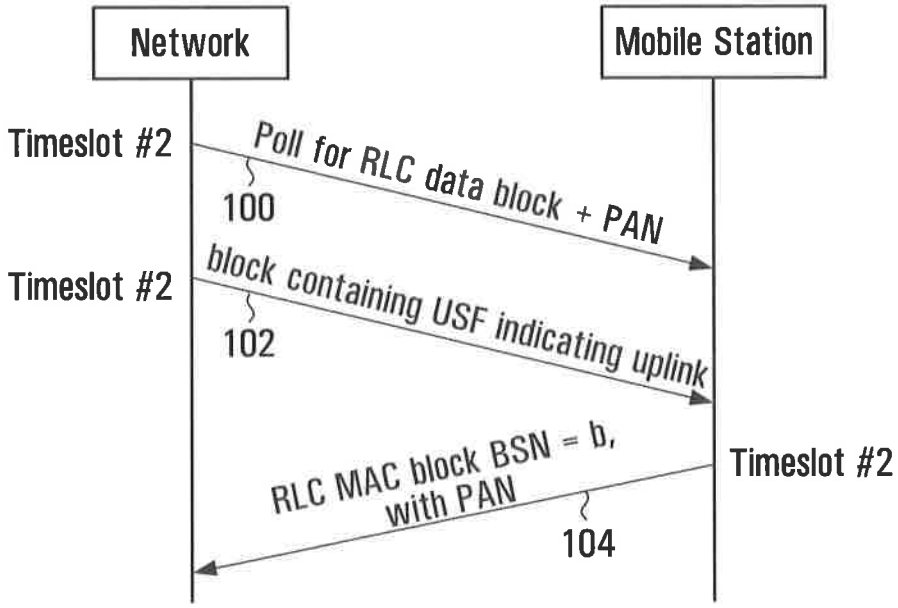

Network
Mobile Station
Timeslot #2
Poll for RLC data block + PAN
100
Timeslot #2
block containing USF indicating uplink
102
RLC MAC block BSN = b,
with PAN
Timeslot #2
104

FIG. 3

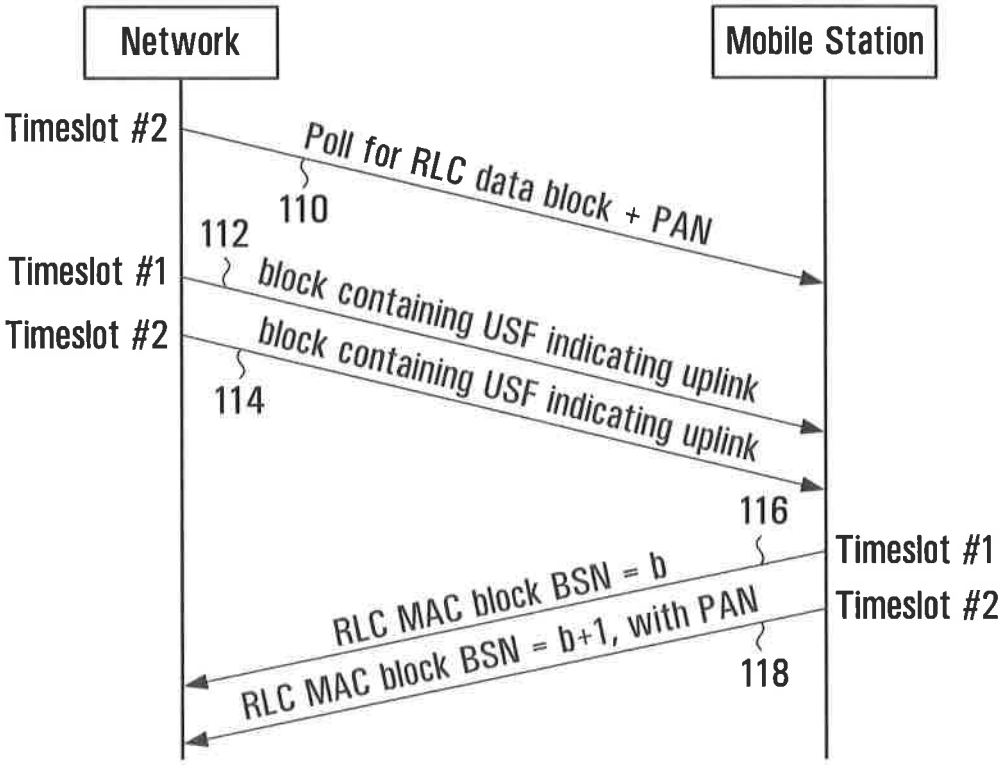

Network
Mobile Station
Timeslot #2
Poll for RLC data block + PAN
110
112
Timeslot #1
block containing USF indicating uplink
Timeslot #2
block containing USF indicating uplink
114
116
Timeslot #1
RLC MAC block BSN = b
Timeslot #2
RLC MAC block BSN = b+1, with PAN
118

FIG. 4

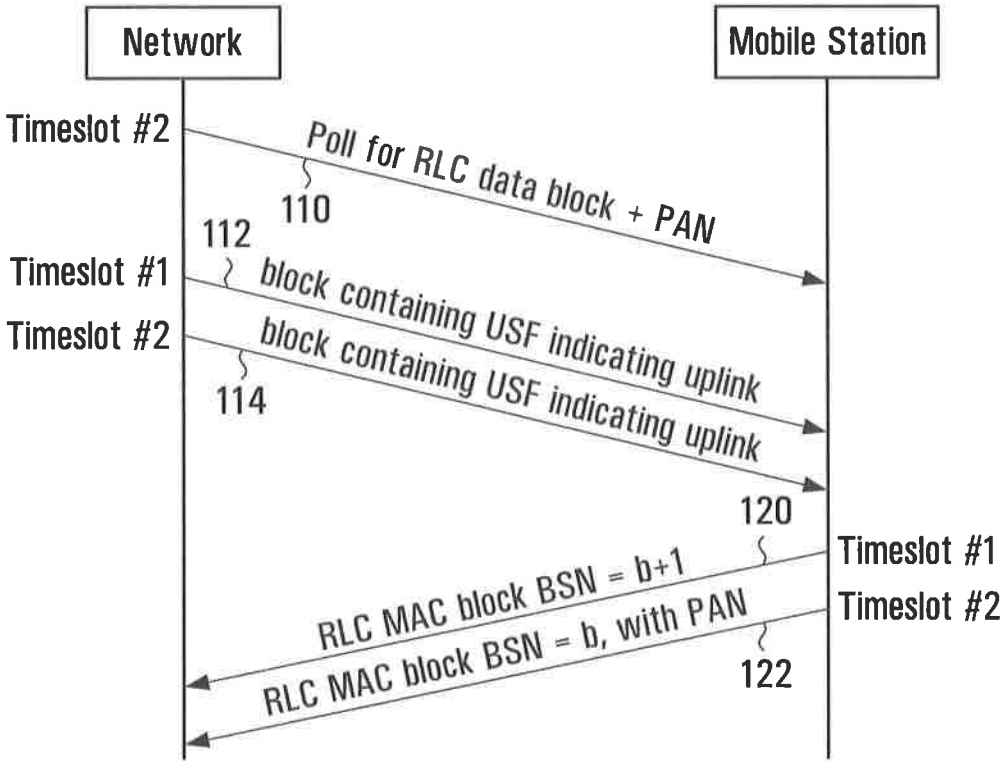

Network
Mobile Station
Timeslot #2
Poll for RLC data block + PAN
110
112
Timeslot #1
block containing USF indicating uplink
Timeslot #2
block containing USF indicating uplink
114
120
Timeslot #1
RLC MAC block BSN = b+1
Timeslot #2
RLC MAC block BSN = b, with PAN
122

FIG. 5

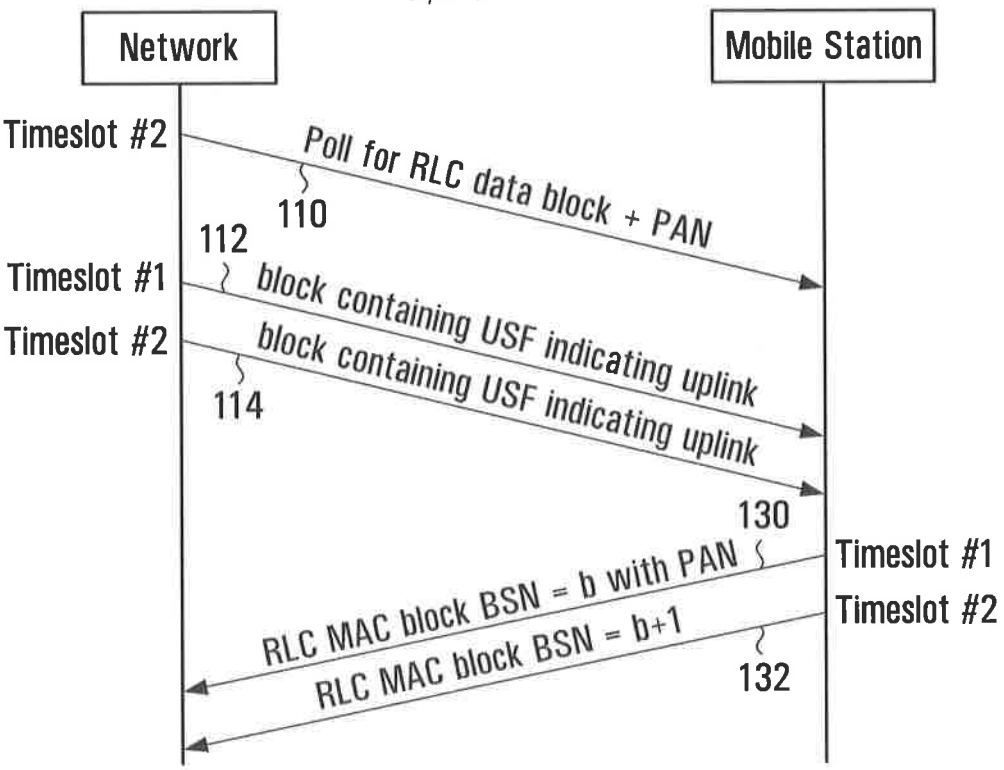

Network
Mobile Station
Timeslot #2
Poll for RLC data block + PAN
110
112
Timeslot #1
block containing USF indicating uplink
Timeslot #2
block containing USF indicating uplink
114
130
Timeslot #1
RLC MAC block BSN = b with PAN
Timeslot #2
RLC MAC block BSN = b+1
132

FIG. 6

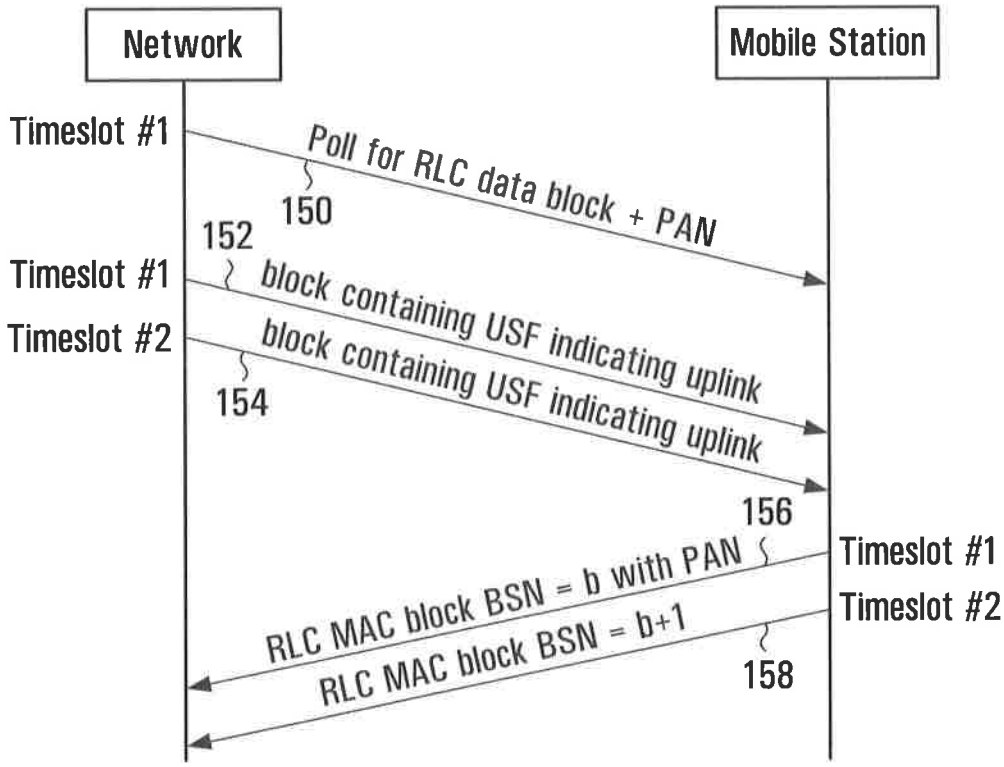

Network
Mobile Station
Timeslot #1
Poll for RLC data block + PAN
150
152
Timeslot #1
block containing USF indicating uplink
Timeslot #2
block containing USF indicating uplink
154
156
Timeslot #1
RLC MAC block BSN = b with PAN
Timeslot #2
RLC MAC block BSN = b+1
158

FIG. 7

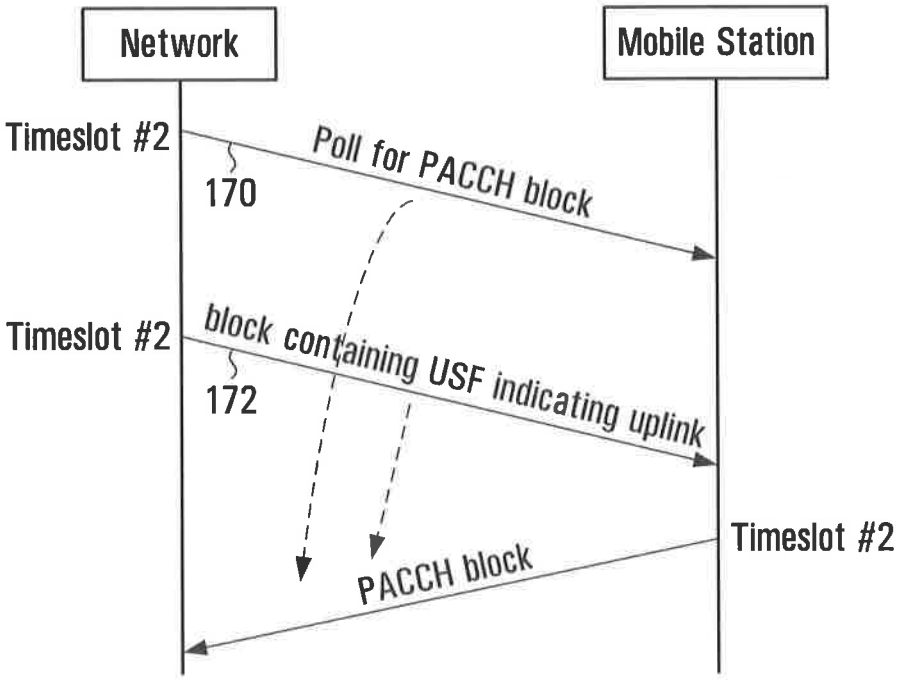

Network
Mobile Station
Timeslot #2
170
Poll for PACCH block
Timeslot #2
172
block containing USF indicating uplink
Timeslot #2
PACCH block

FIG. 8

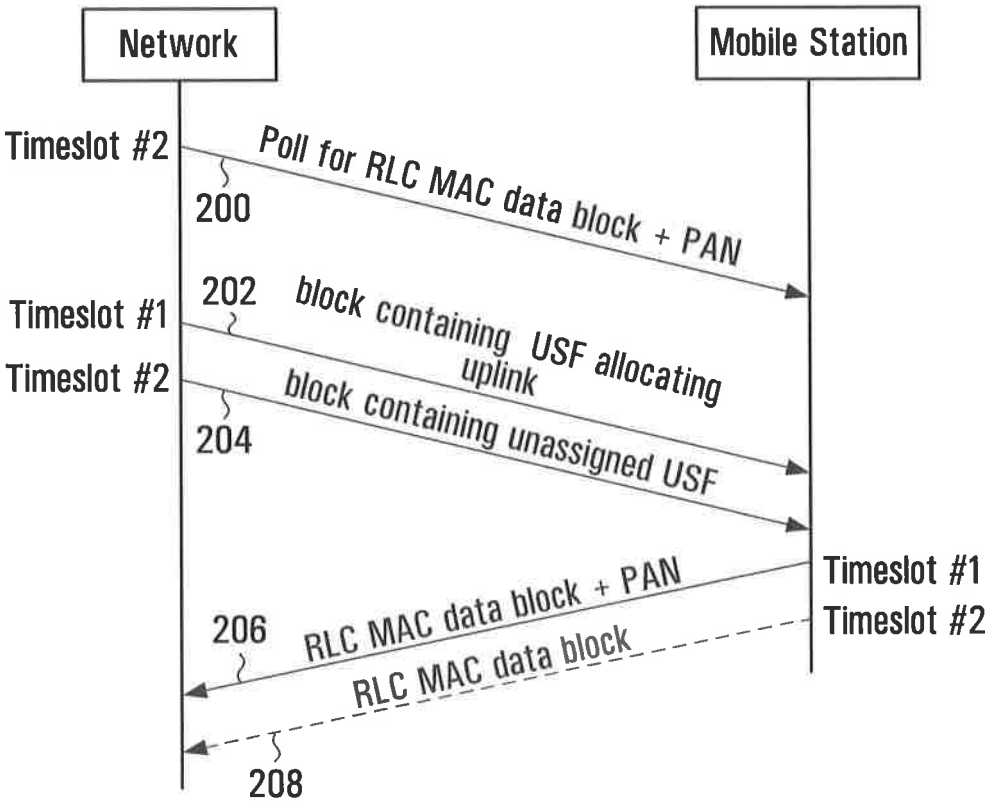

Network
Mobile Station
Timeslot #2
Poll for RLC MAC data block + PAN
200
Timeslot #1
202
block containing USF allocating uplink
Timeslot #2
block containing unassigned USF
204
Timeslot #1
Timeslot #2
206
RLC MAC data block + PAN
RLC MAC data block
208

FIG. 9

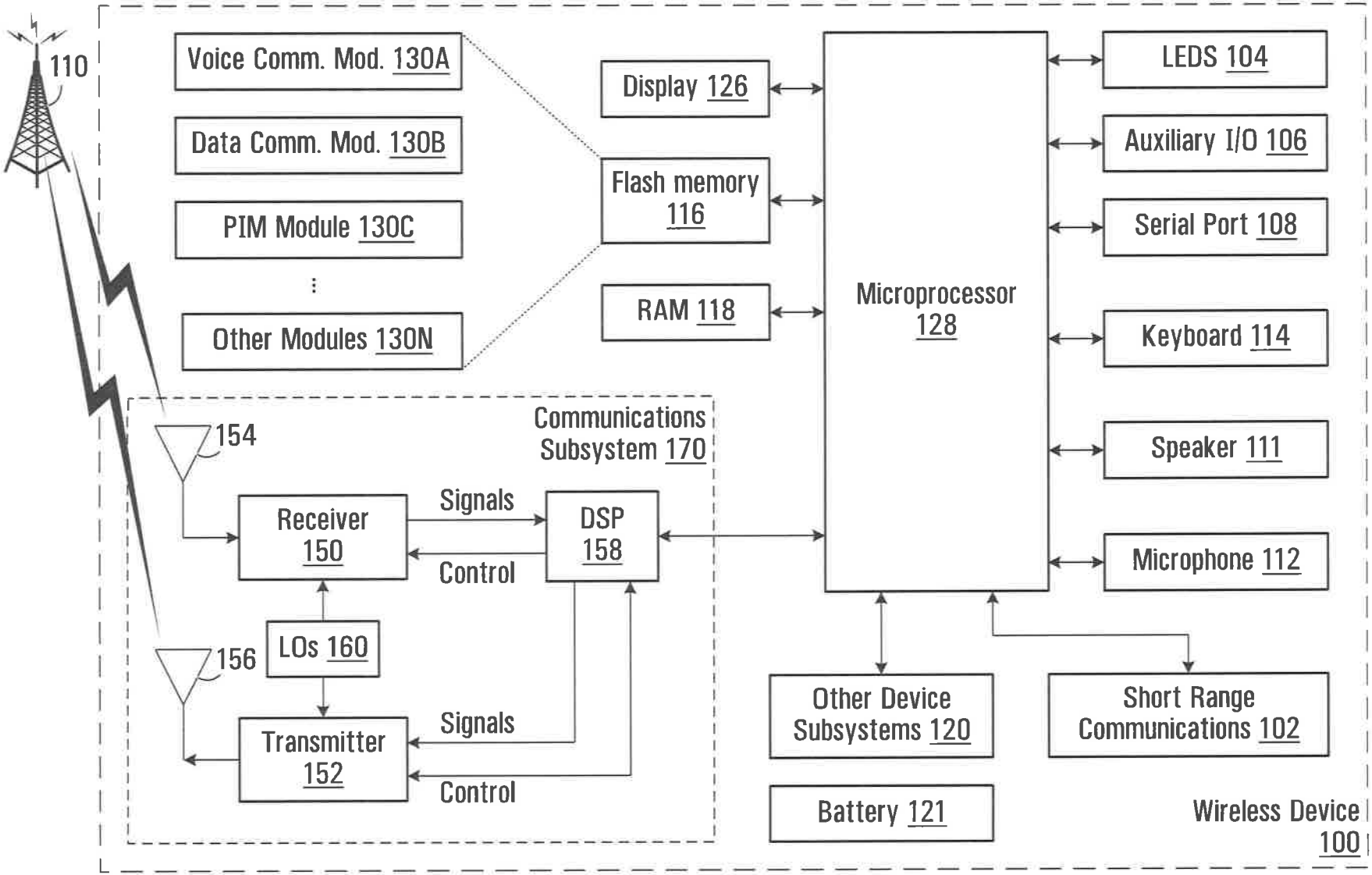

110
Voice Comm. Mod. 130A
Data Comm. Mod. 130B
PIM Module 130C
Other Modules 130N
Display 126
Flash memory 116
RAM 118
Microprocessor 128
LEDS 104
Auxiliary I/O 106
Serial Port 108
Keyboard 114
Speaker 111
Microphone 112
Communications Subsystem 170
154
Receiver 150
Signals
Control
DSP 158
LOs 160
156
Transmitter 152
Signals
Control
Other Device Subsystems 120
Short Range Communications 102
Battery 121
Wireless Device 100

FIG. 10

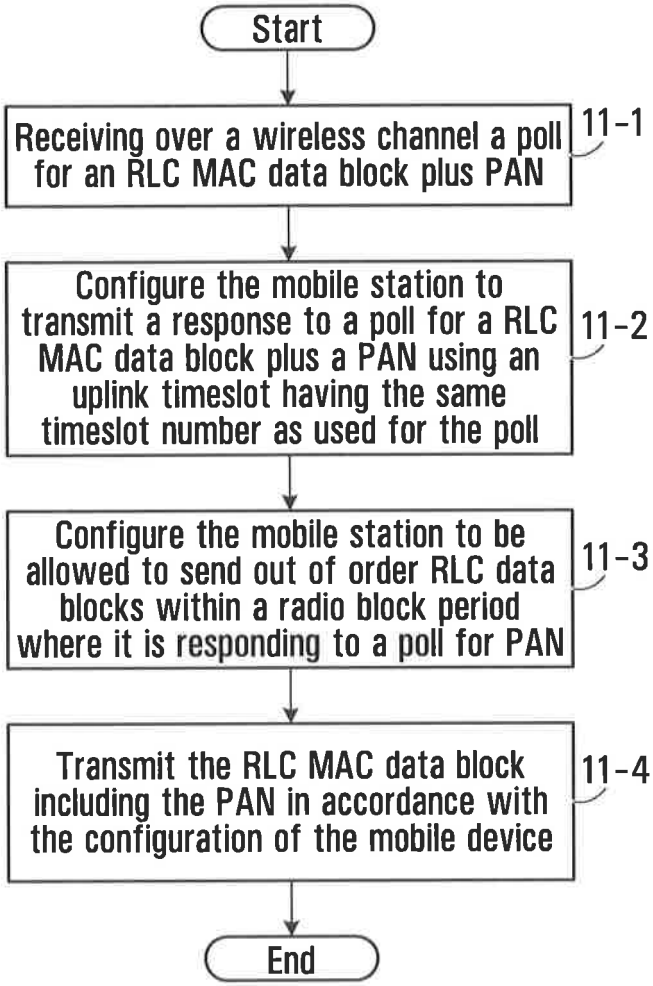

Start
Receiving over a wireless channel a poll for an RLC MAC data block plus PAN
11-1
Configure the mobile station to transmit a response to a poll for a RLC MAC data block plus a PAN using an uplink timeslot having the same timeslot number as used for the poll
11-2
Configure the mobile station to be allowed to send out of order RLC data blocks within a radio block period where it is responding to a poll for PAN
11-3
Transmit the RLC MAC data block including the PAN in accordance with the configuration of the mobile device
11-4
End

FIG. 11

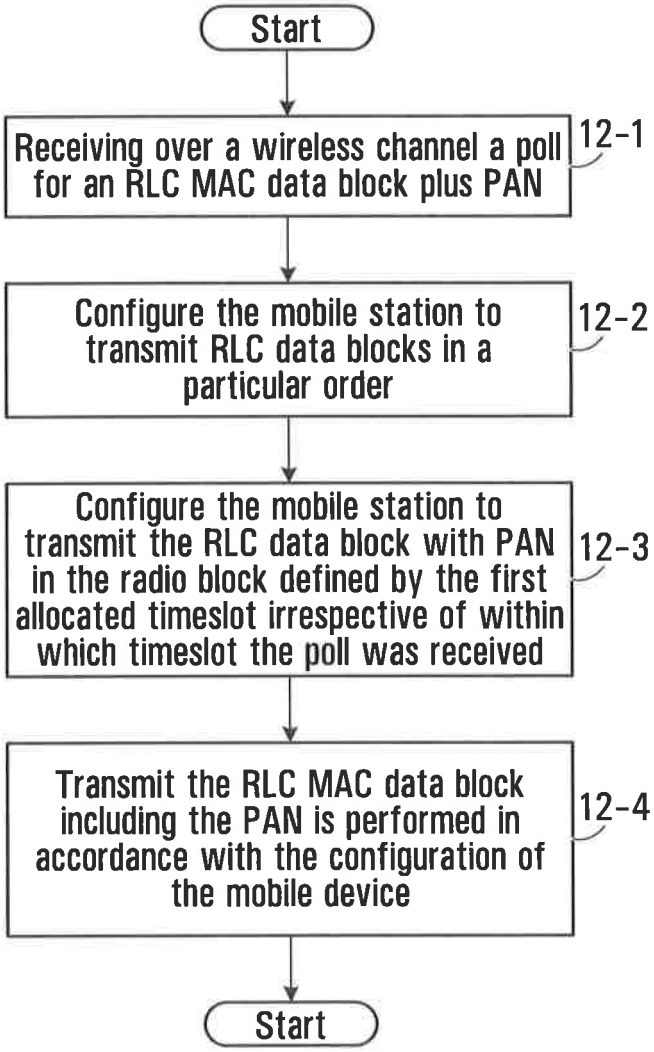

Start
Receiving over a wireless channel a poll for an RLC MAC data block plus PAN
12-1
Configure the mobile station to transmit RLC data blocks in a particular order
12-2
Configure the mobile station to transmit the RLC data block with PAN in the radio block defined by the first allocated timeslot irrespective of within which timeslot the poll was received
12-3
Transmit the RLC MAC data block including the PAN is performed in accordance with the configuration of the mobile device
12-4
Start

FIG. 12

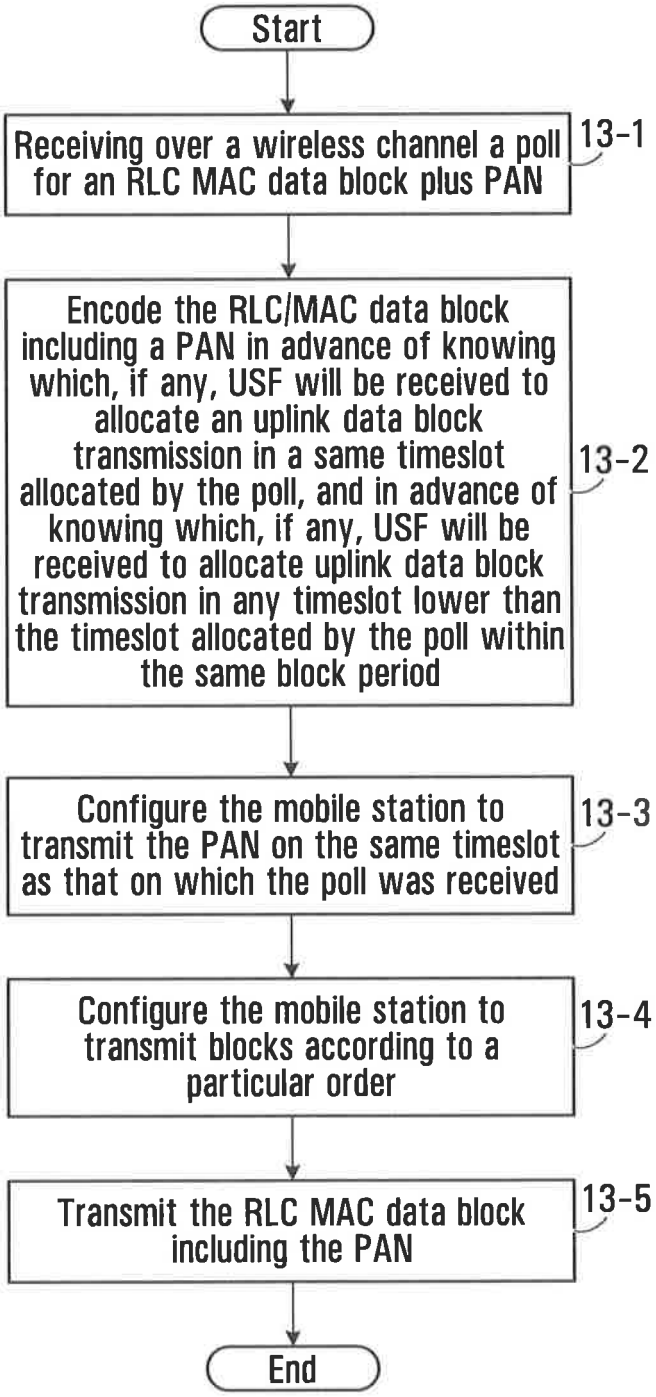

Start
Receiving over a wireless channel a poll for an RLC MAC data block plus PAN
13-1
Encode the RLC/MAC data block including a PAN in advance of knowing which, if any, USF will be received to allocate an uplink data block transmission in a same timeslot allocated by the poll, and in advance of knowing which, if any, USF will be received to allocate uplink data block transmission in any timeslot lower than the timeslot allocated by the poll within the same block period
13-2
Configure the mobile station to transmit the PAN on the same timeslot as that on which the poll was received
13-3
Configure the mobile station to transmit blocks according to a particular order
13-4
Transmit the RLC MAC data block including the PAN
13-5
End

FIG. 13

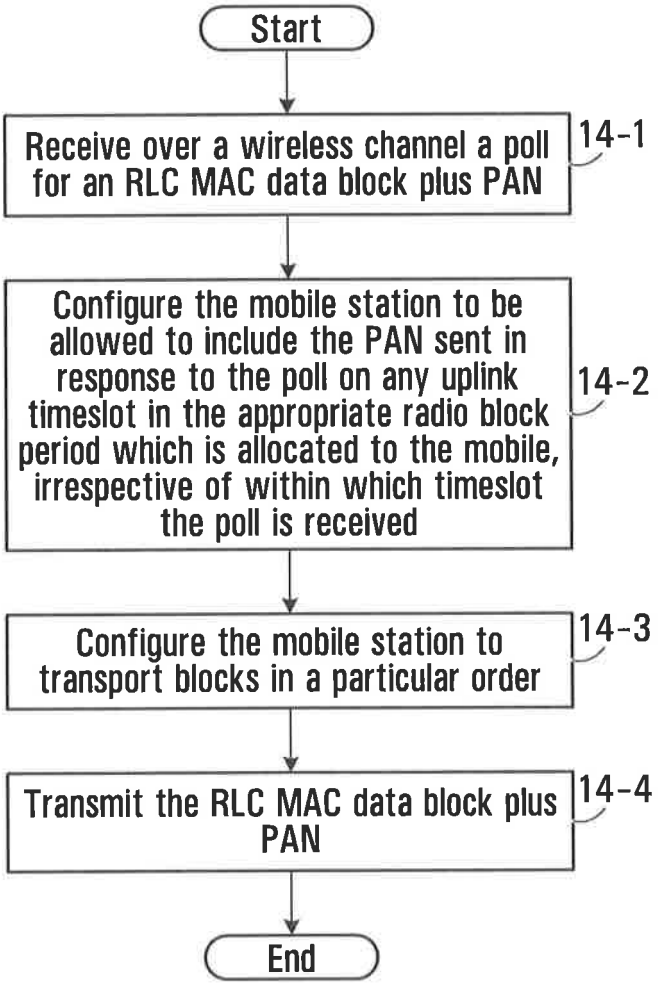

Start
Receive over a wireless channel a poll for an RLC MAC data block plus PAN
14-1
Configure the mobile station to be allowed to include the PAN sent in response to the poll on any uplink timeslot in the appropriate radio block period which is allocated to the mobile, irrespective of within which timeslot the poll is received
14-2
Configure the mobile station to transport blocks in a particular order
14-3
Transmit the RLC MAC data block plus PAN
14-4
End

FIG. 14

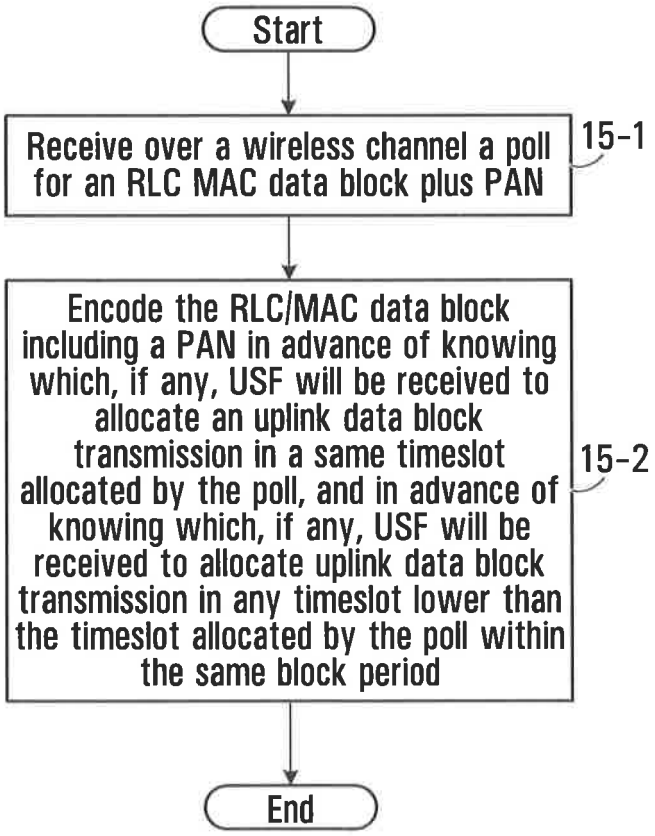

Start
Receive over a wireless channel a poll for an RLC MAC data block plus PAN
15-1
Encode the RLC/MAC data block including a PAN in advance of knowing which, if any, USF will be received to allocate an uplink data block transmission in a same timeslot allocated by the poll, and in advance of knowing which, if any, USF will be received to allocate uplink data block transmission in any timeslot lower than the timeslot allocated by the poll within the same block period
15-2
End

FIG. 15

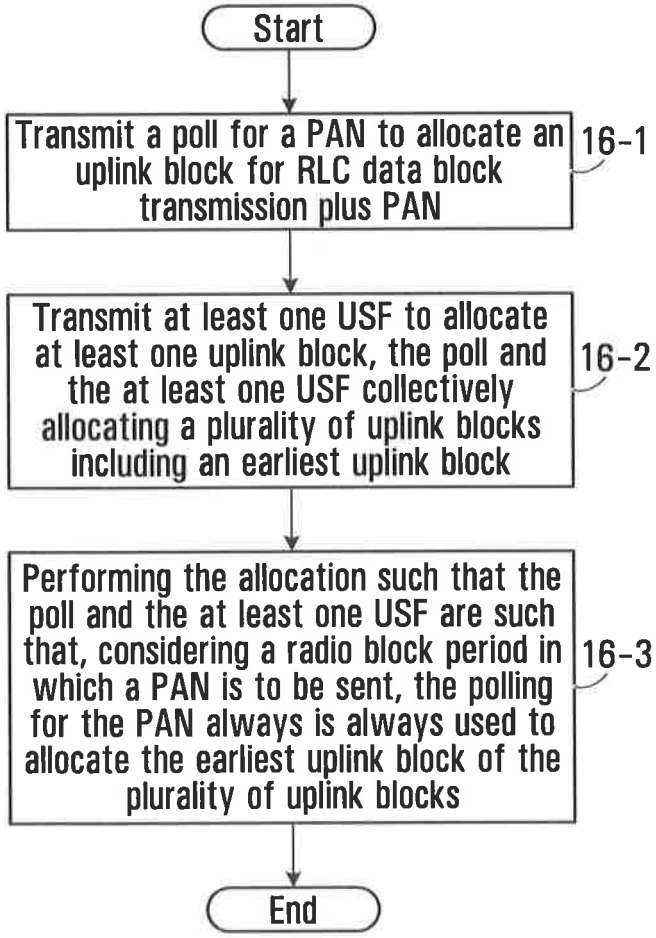

Start
Transmit a poll for a PAN to allocate an uplink block for RLC data block transmission plus PAN
16-1
Transmit at least one USF to allocate at least one uplink block, the poll and the at least one USF collectively allocating a plurality of uplink blocks including an earliest uplink block
16-2
Performing the allocation such that the poll and the at least one USF are such that, considering a radio block period in which a PAN is to be sent, the polling for the PAN always is always used to allocate the earliest uplink block of the plurality of uplink blocks
16-3
End

FIG. 16

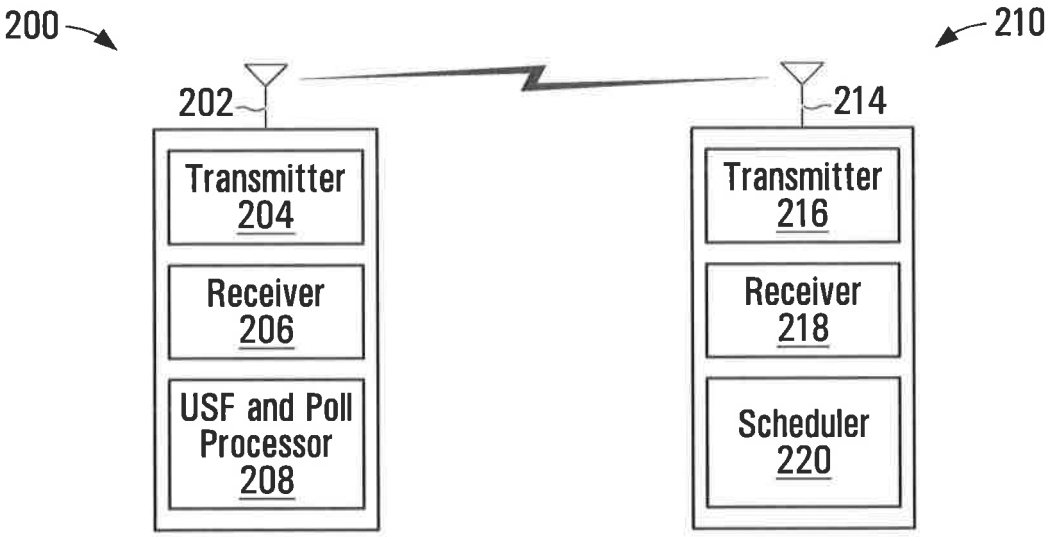

200
210
202
214
Transmitter 204
Receiver 206
USF and Poll Processor 208
Transmitter 216
Receiver 218
Scheduler 220

FIG. 17