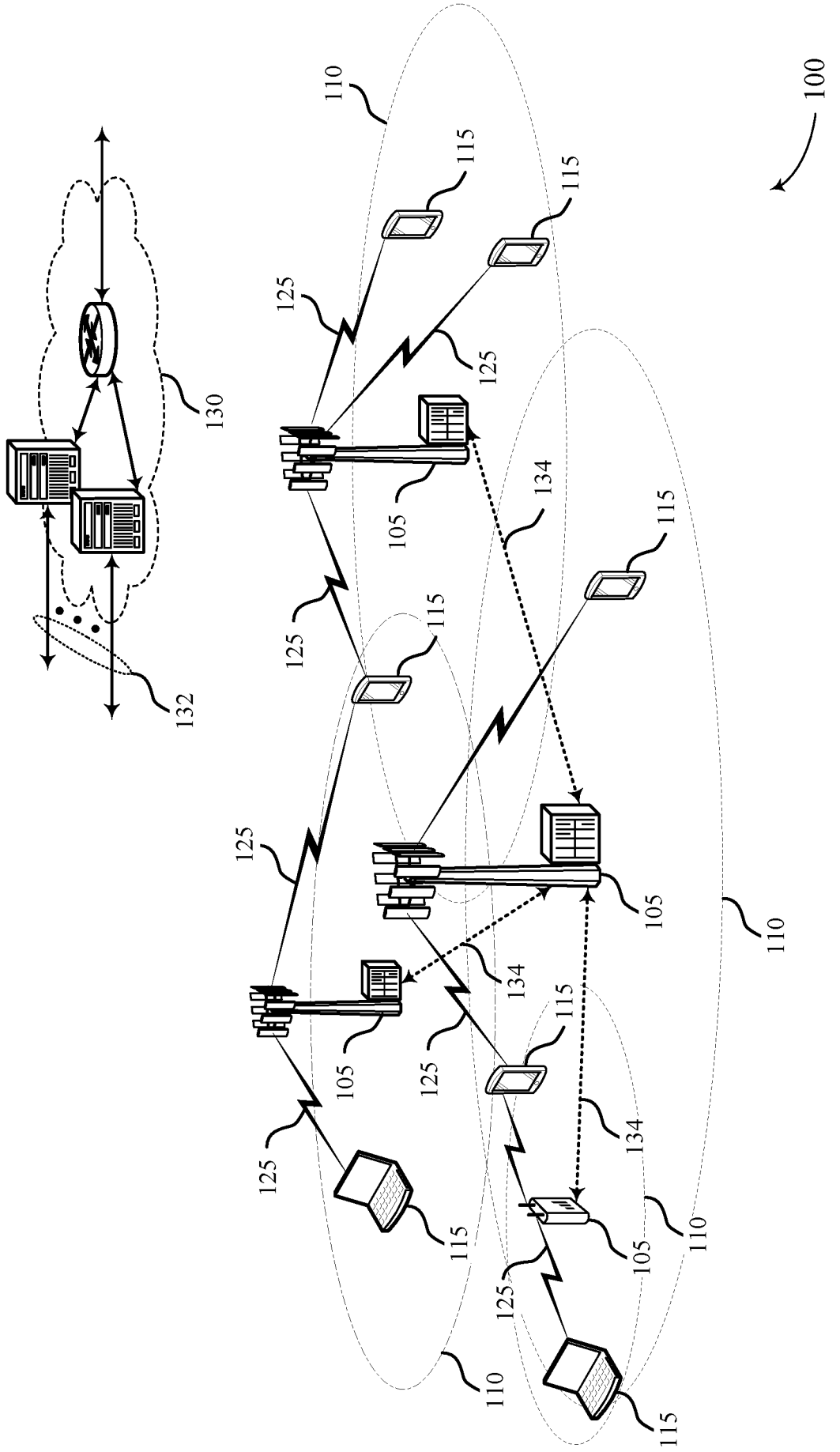



FIG. 1

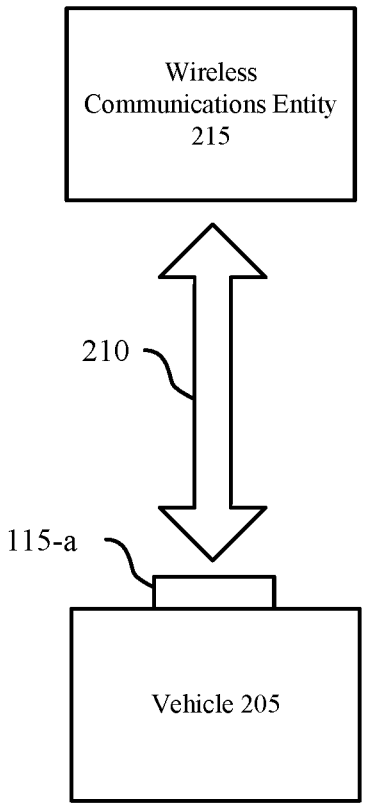

Wireless
Communications Entity
215
210
115-a
Vehicle 205
200

FIG. 2

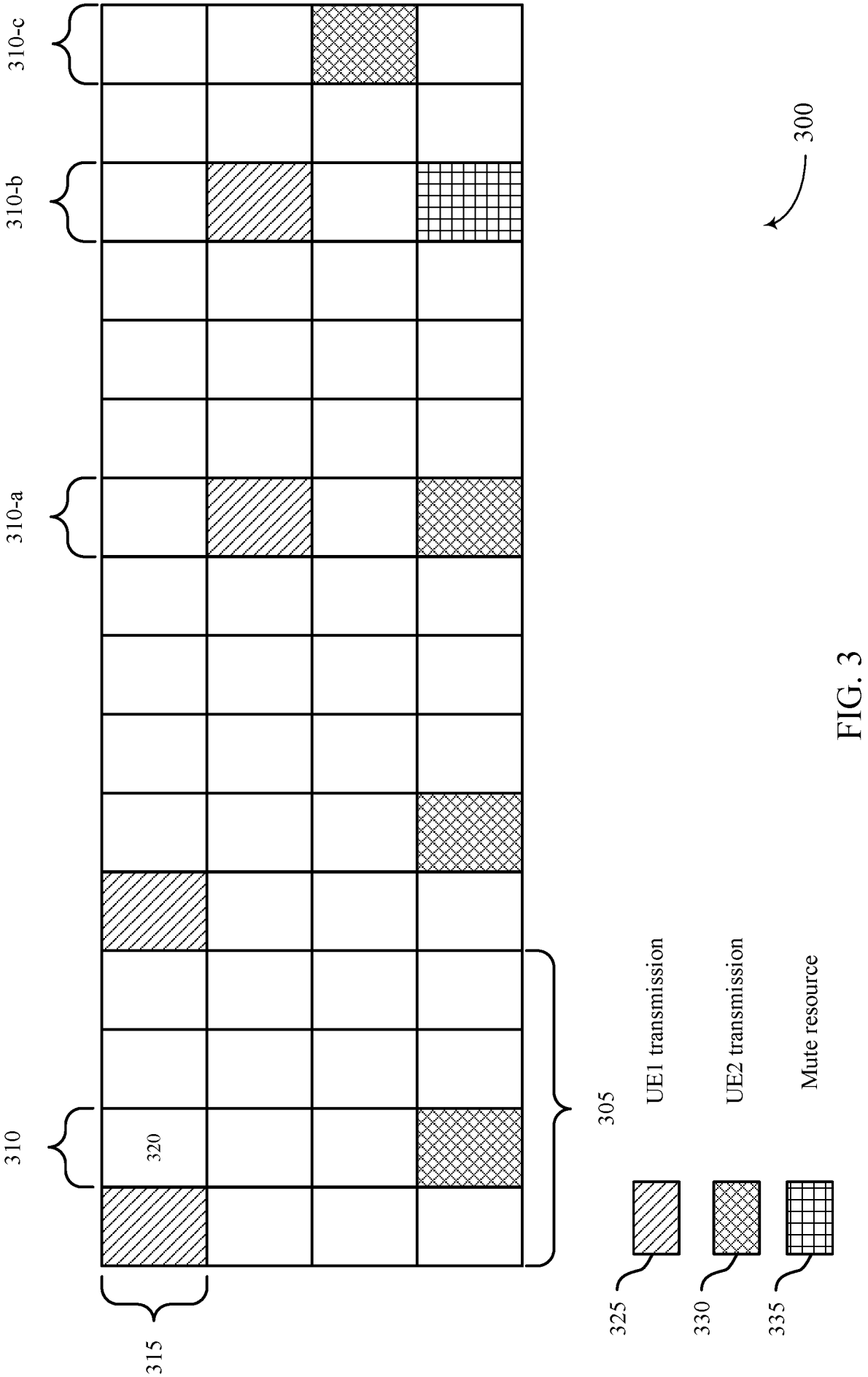

310-c
310-b
310-a
310
320
315
305
300
UE1 transmission
UE2 transmission
Mute resource
325
330
335

FIG. 3

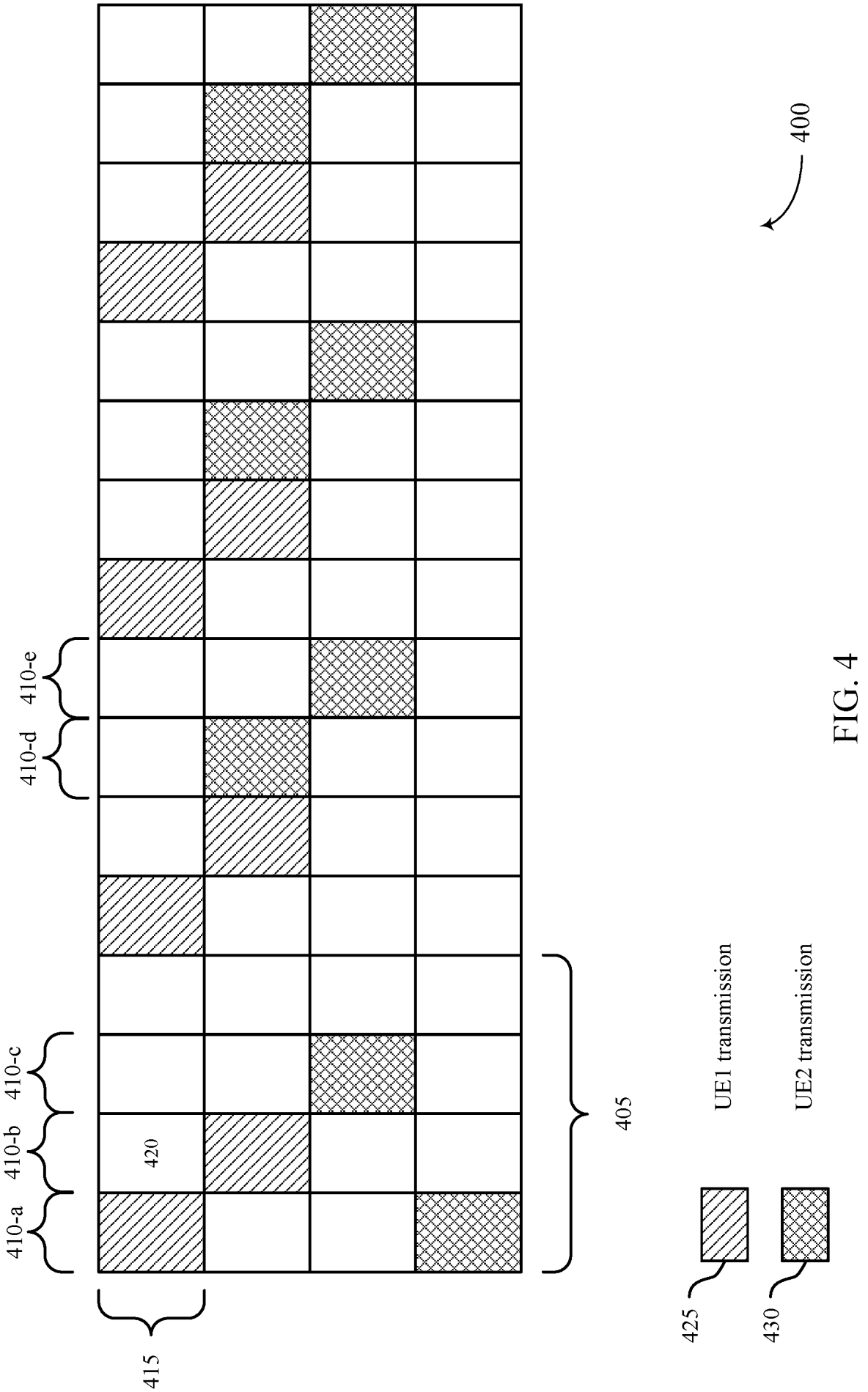

400
410-a
410-b
410-c
410-d
410-e
420
405
415
UE1 transmission
UE2 transmission
425
430

FIG. 4

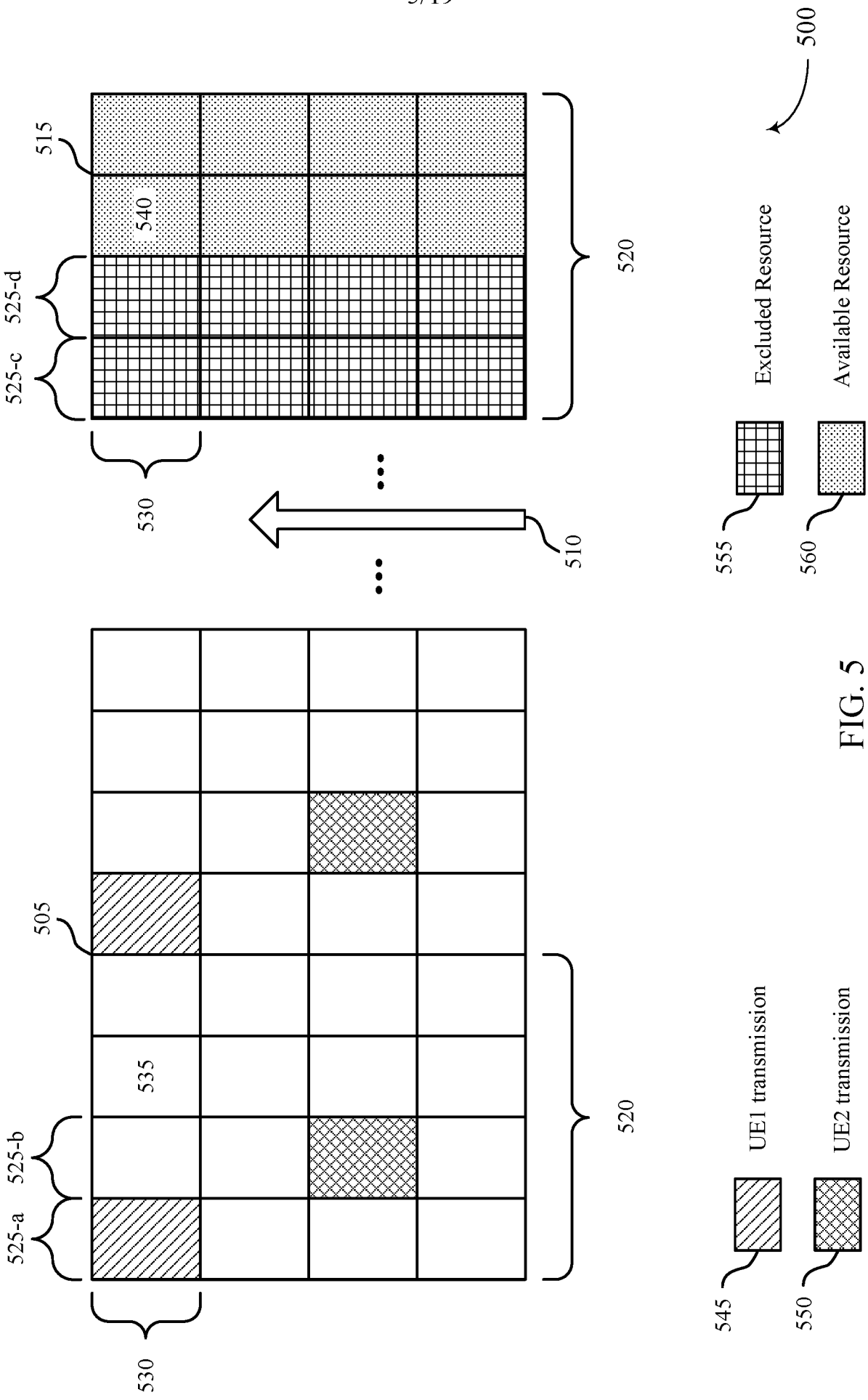

500
Excluded Resource
Available Resource
555
560
UE1 transmission
UE2 transmission
545
550
515
540
525-d
525-c
520
530
510
505
535
525-b
525-a
520
530

FIG. 5

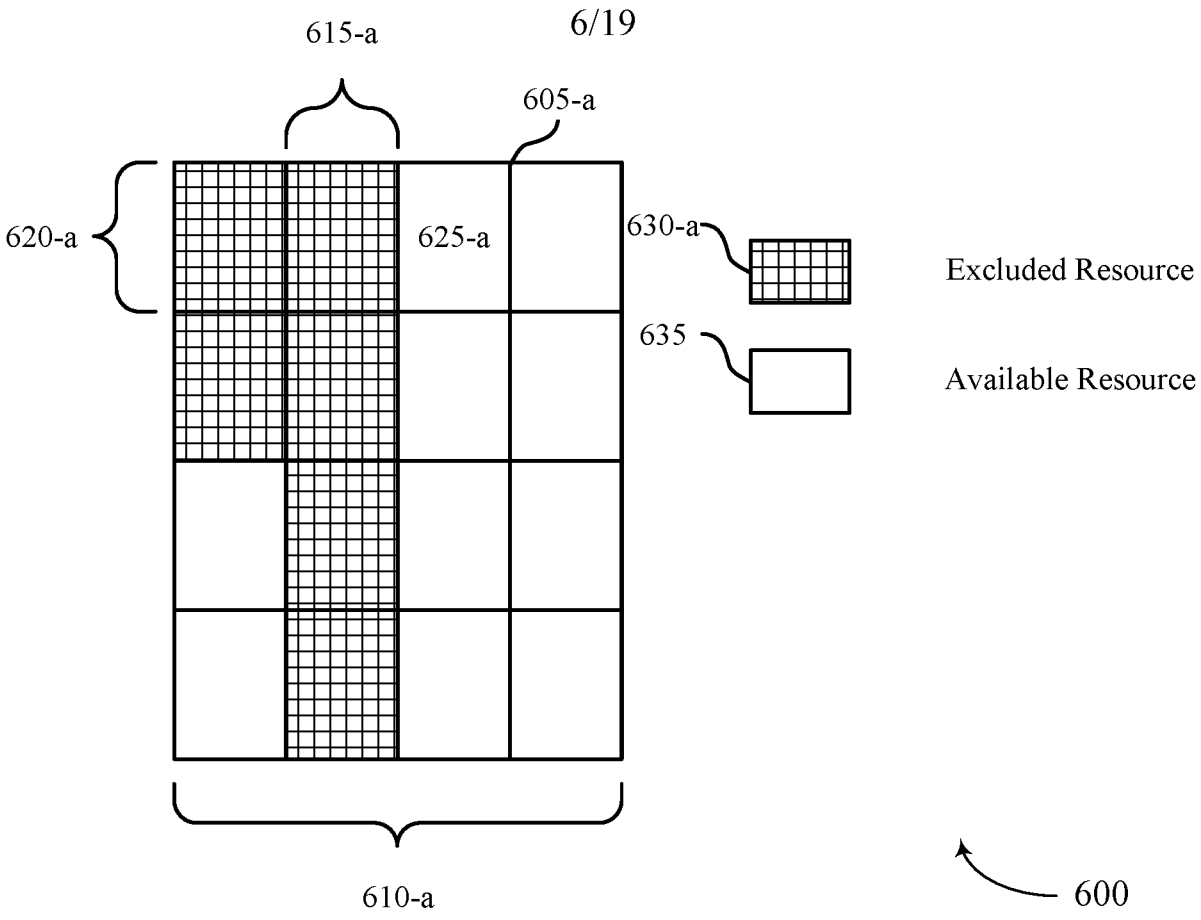

615-a
605-a
620-a
625-a
630-a
635
Excluded Resource
Available Resource
610-a
600

FIG. 6A

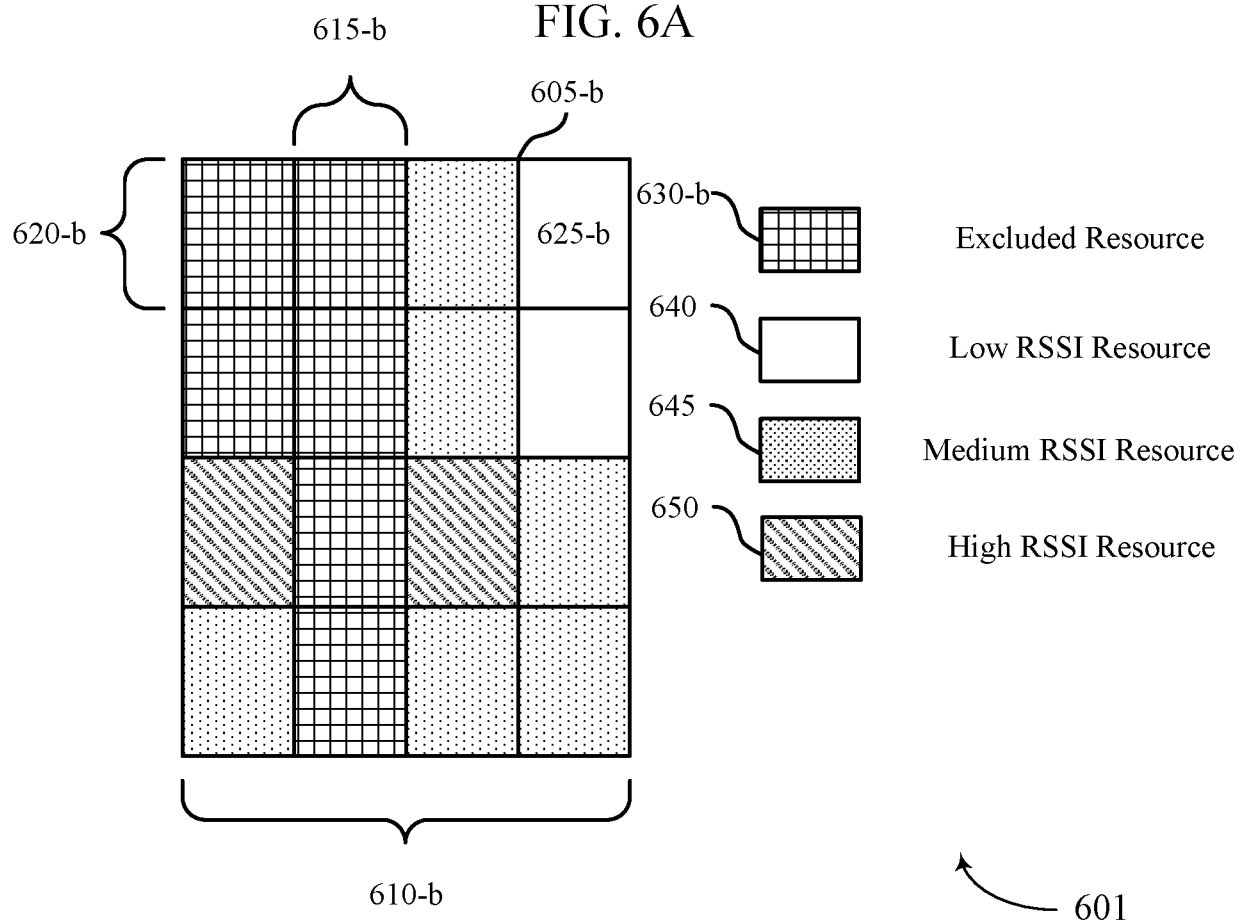

615-b
605-b
620-b
625-b
630-b
640
645
650
Excluded Resource
Low RSSI Resource
Medium RSSI Resource
High RSSI Resource
610-b
601

FIG. 6B

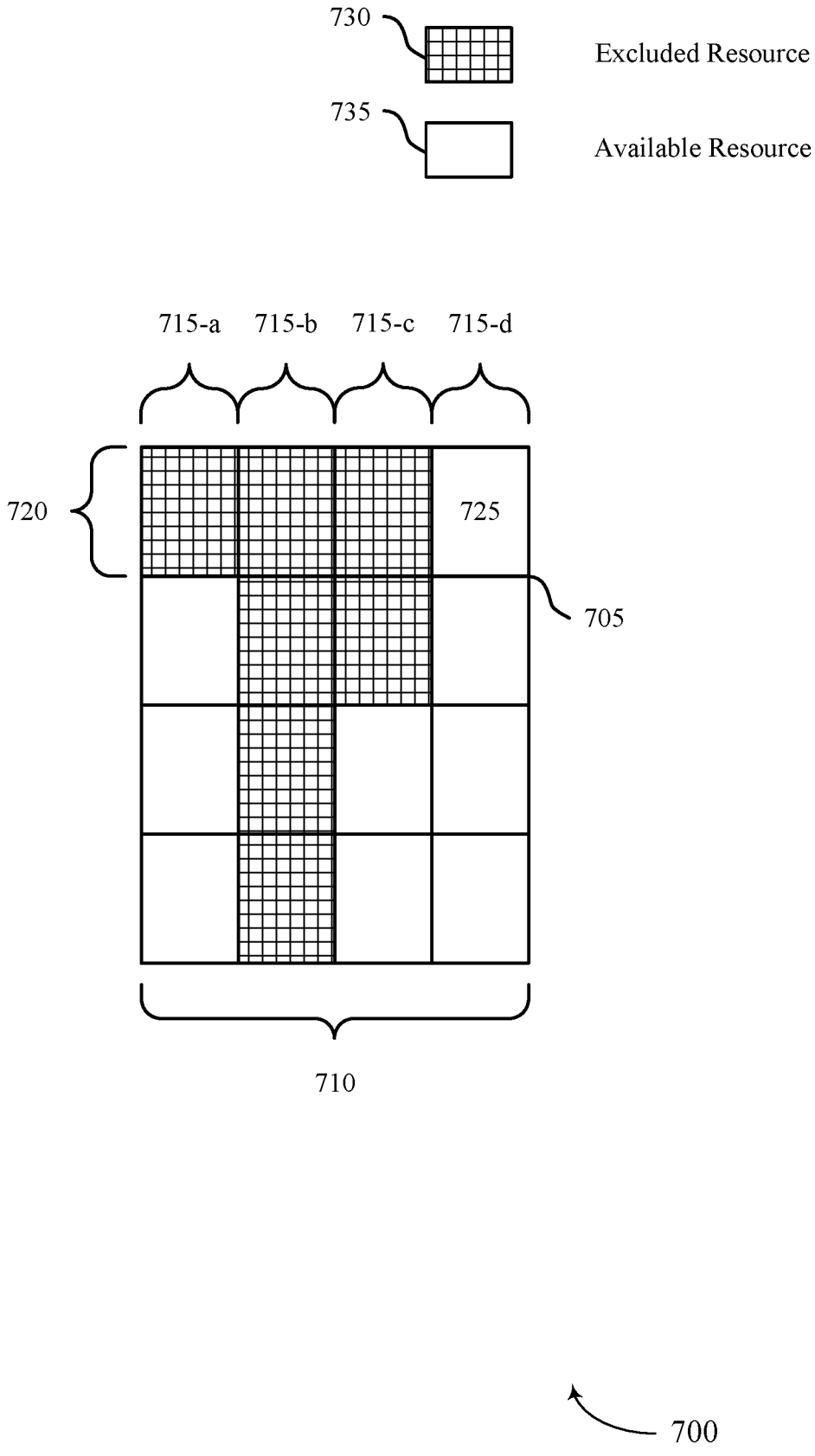

730
Excluded Resource
735
Available Resource
715-a
715-b
715-c
715-d
720
725
705
710
700

FIG. 7

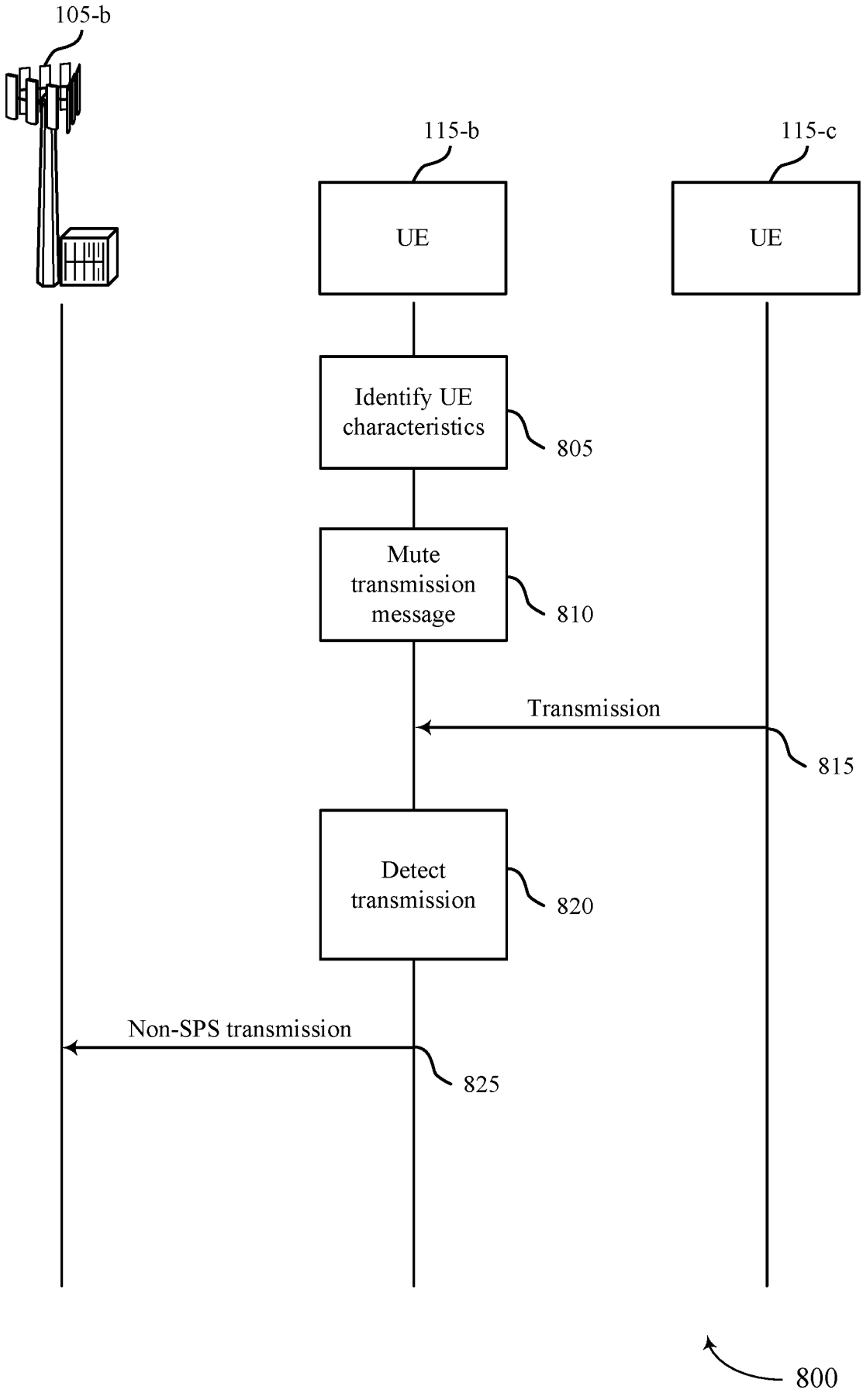

105-b
115-b
115-c
UE
UE
Identify UE characteristics
805
Mute transmission message
810
Transmission
815
Detect transmission
820
Non-SPS transmission
825
800

FIG. 8

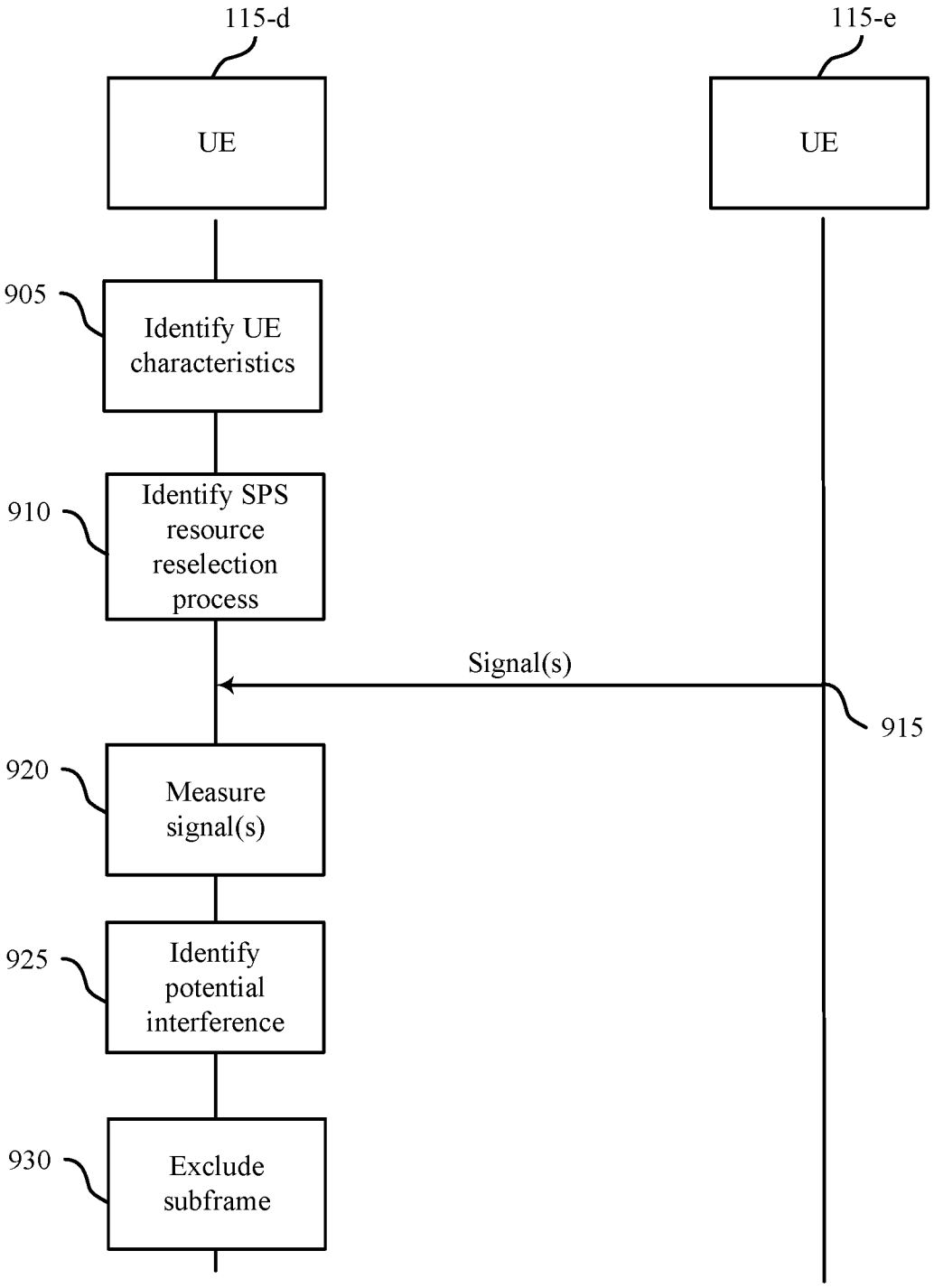

115-d
115-e
UE
UE
905
Identify UE characteristics
910
Identify SPS resource reselection process
Signal(s)
915
920
Measure signal(s)
925
Identify potential interference
930
Exclude subframe

FIG. 9

900

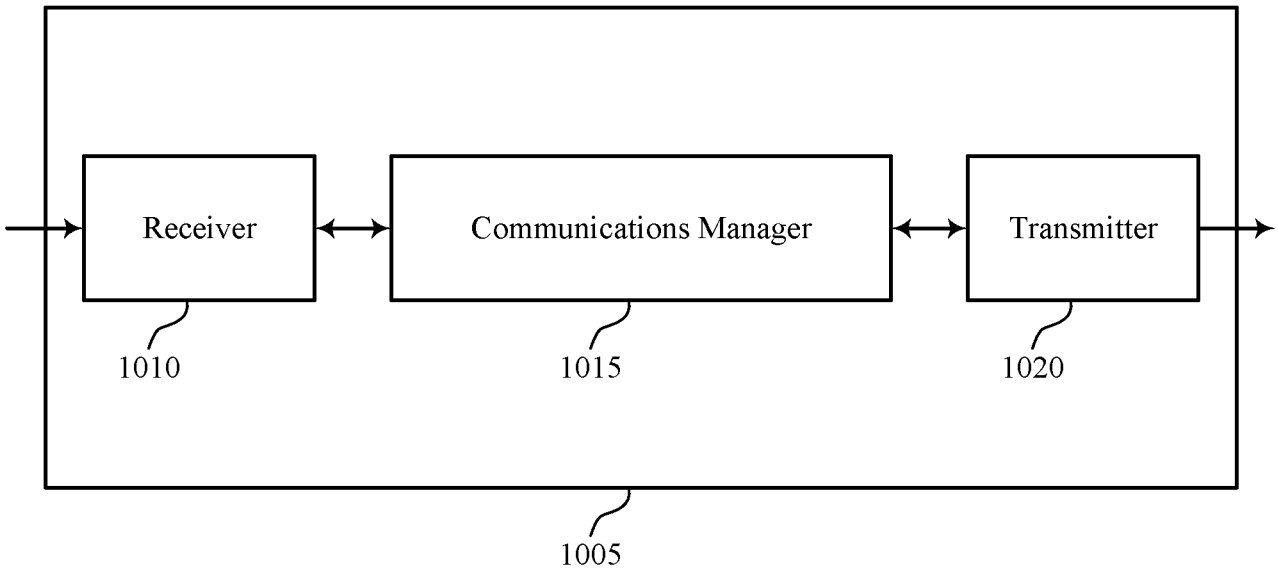

Receiver
Communications Manager
Transmitter
1010
1015
1020
1005
1000

FIG. 10

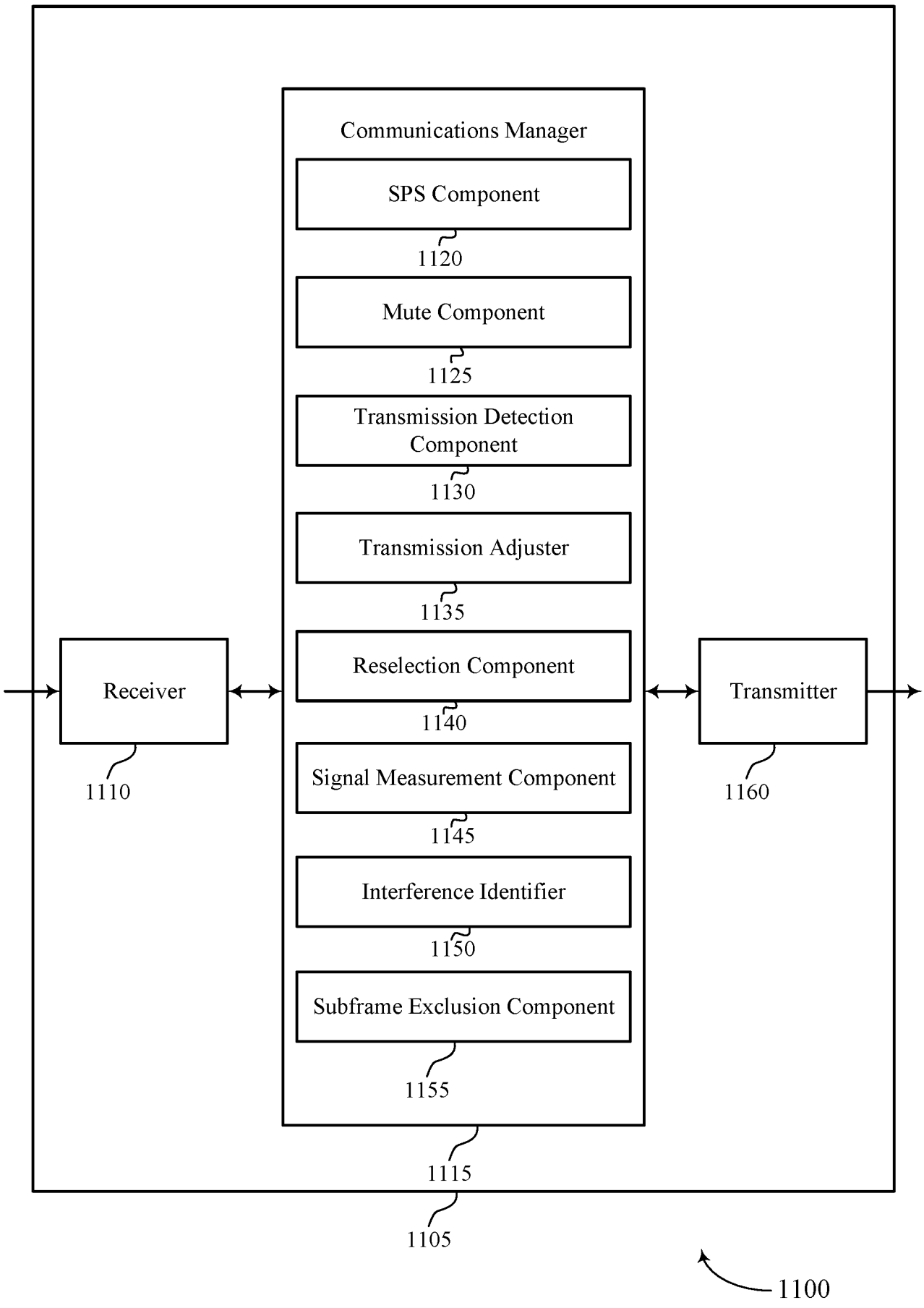

Communications Manager
SPS Component
1120
Mute Component
1125
Transmission Detection Component
1130
Transmission Adjuster
1135
Reselection Component
1140
Signal Measurement Component
1145
Interference Identifier
1150
Subframe Exclusion Component
1155
1115
Receiver
1110
Transmitter
1160
1105
1100

FIG. 11

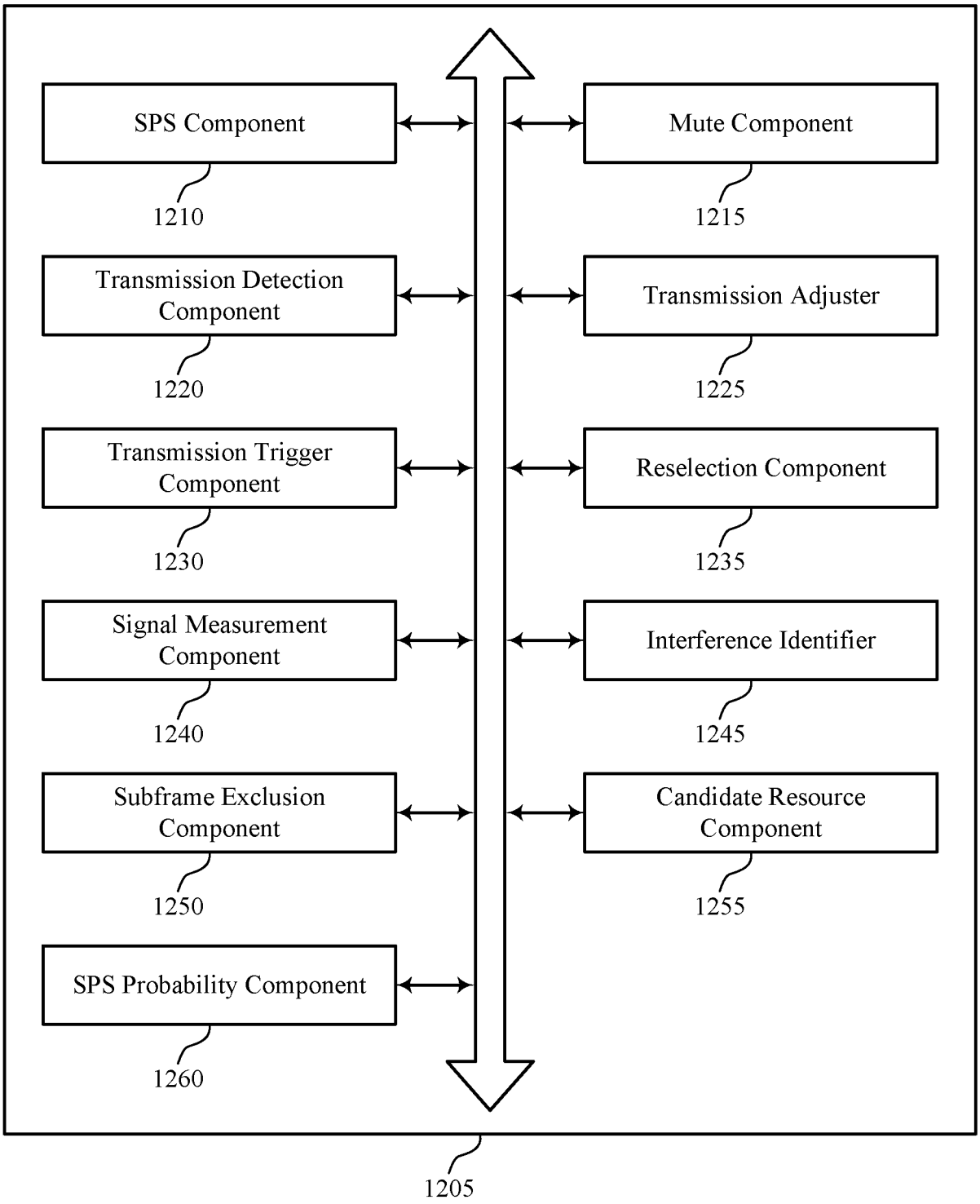

SPS Component
1210
Mute Component
1215
Transmission Detection Component
1220
Transmission Adjuster
1225
Transmission Trigger Component
1230
Reselection Component
1235
Signal Measurement Component
1240
Interference Identifier
1245
Subframe Exclusion Component
1250
Candidate Resource Component
1255
SPS Probability Component
1260
1205
1200

FIG. 12

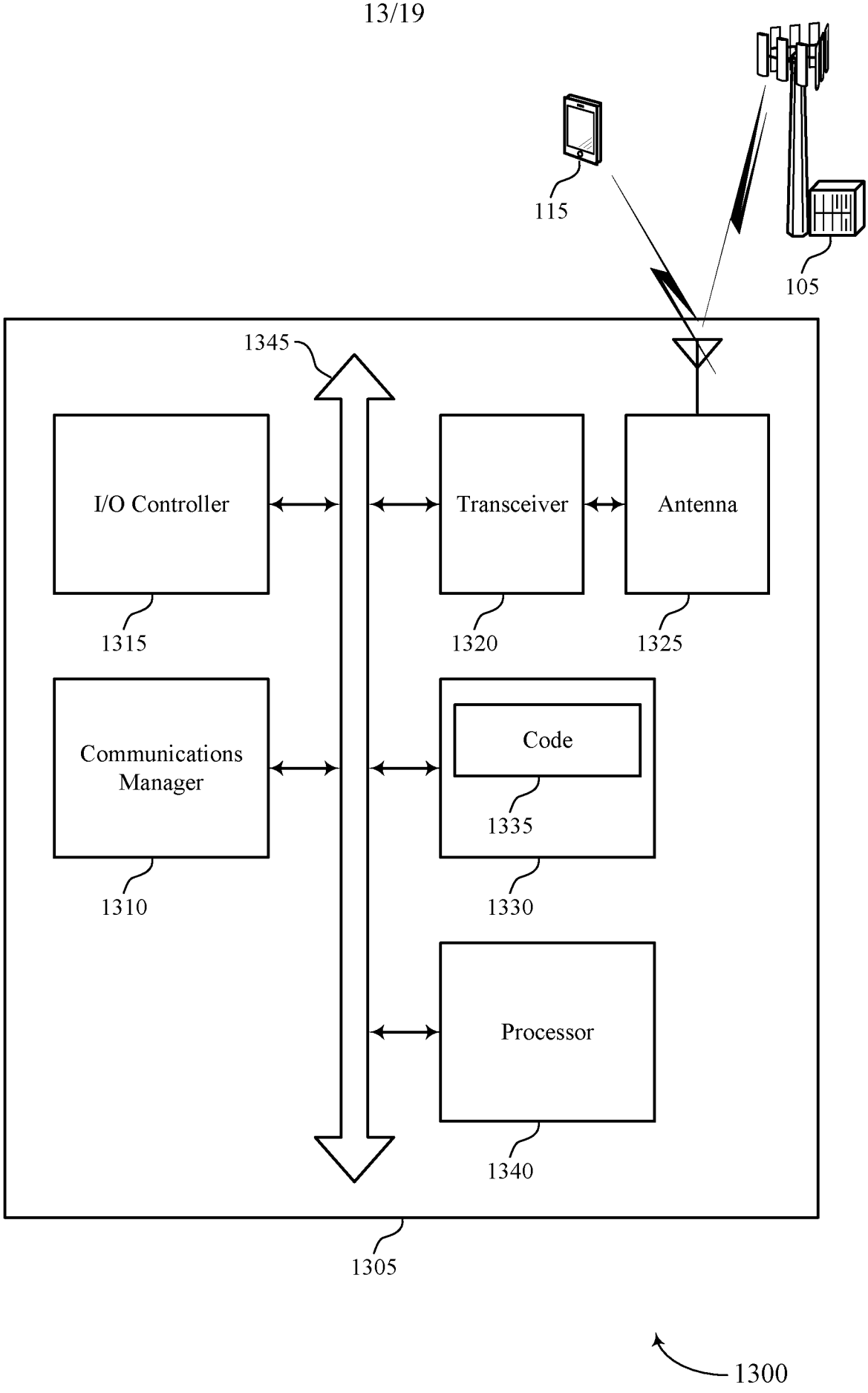

115
105
1345
I/O Controller
Transceiver
Antenna
1315
1320
1325
Communications Manager
Code
1335
1310
1330
Processor
1340
1305
1300

FIG. 13

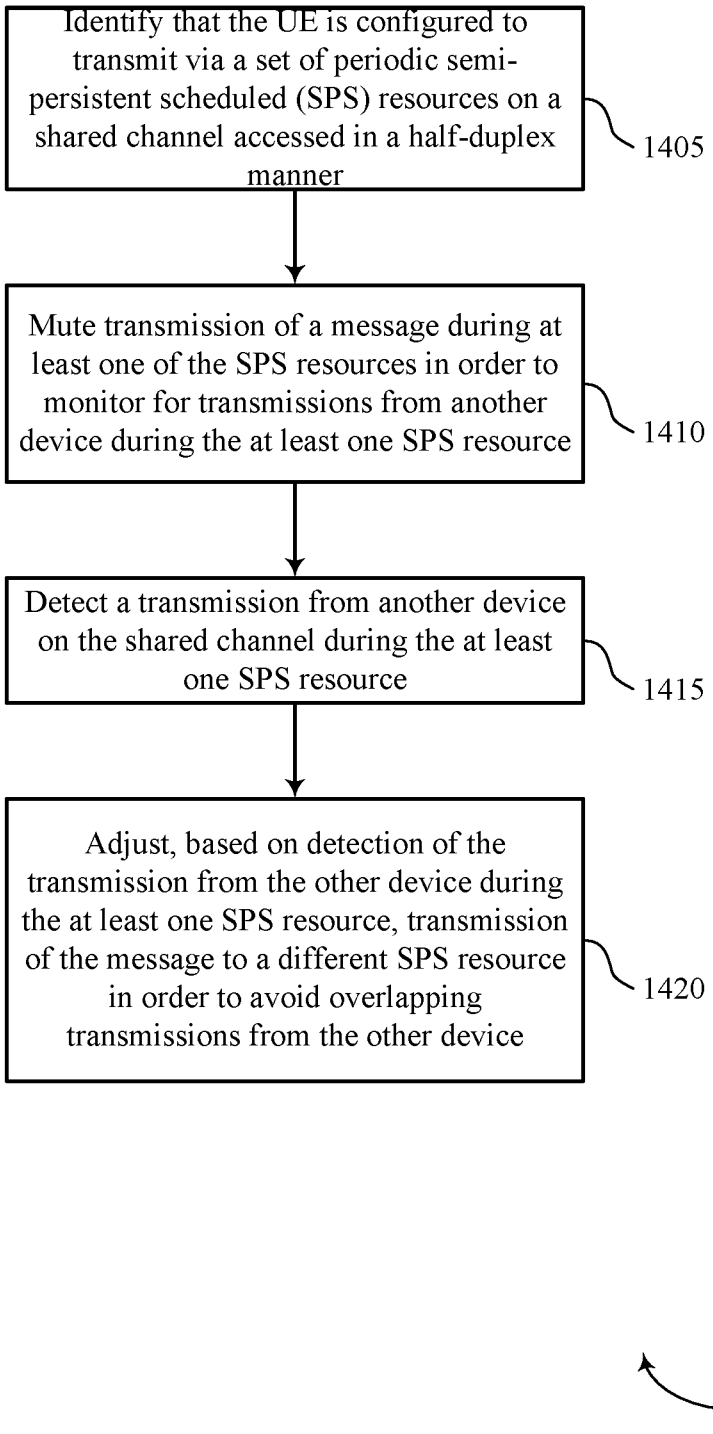

Identify that the UE is configured to transmit via a set of periodic semi-persistent scheduled (SPS) resources on a shared channel accessed in a half-duplex manner
1405
Mute transmission of a message during at least one of the SPS resources in order to monitor for transmissions from another device during the at least one SPS resource
1410
Detect a transmission from another device on the shared channel during the at least one SPS resource
1415
Adjust, based on detection of the transmission from the other device during the at least one SPS resource, transmission of the message to a different SPS resource in order to avoid overlapping transmissions from the other device
1420
1400

FIG. 14

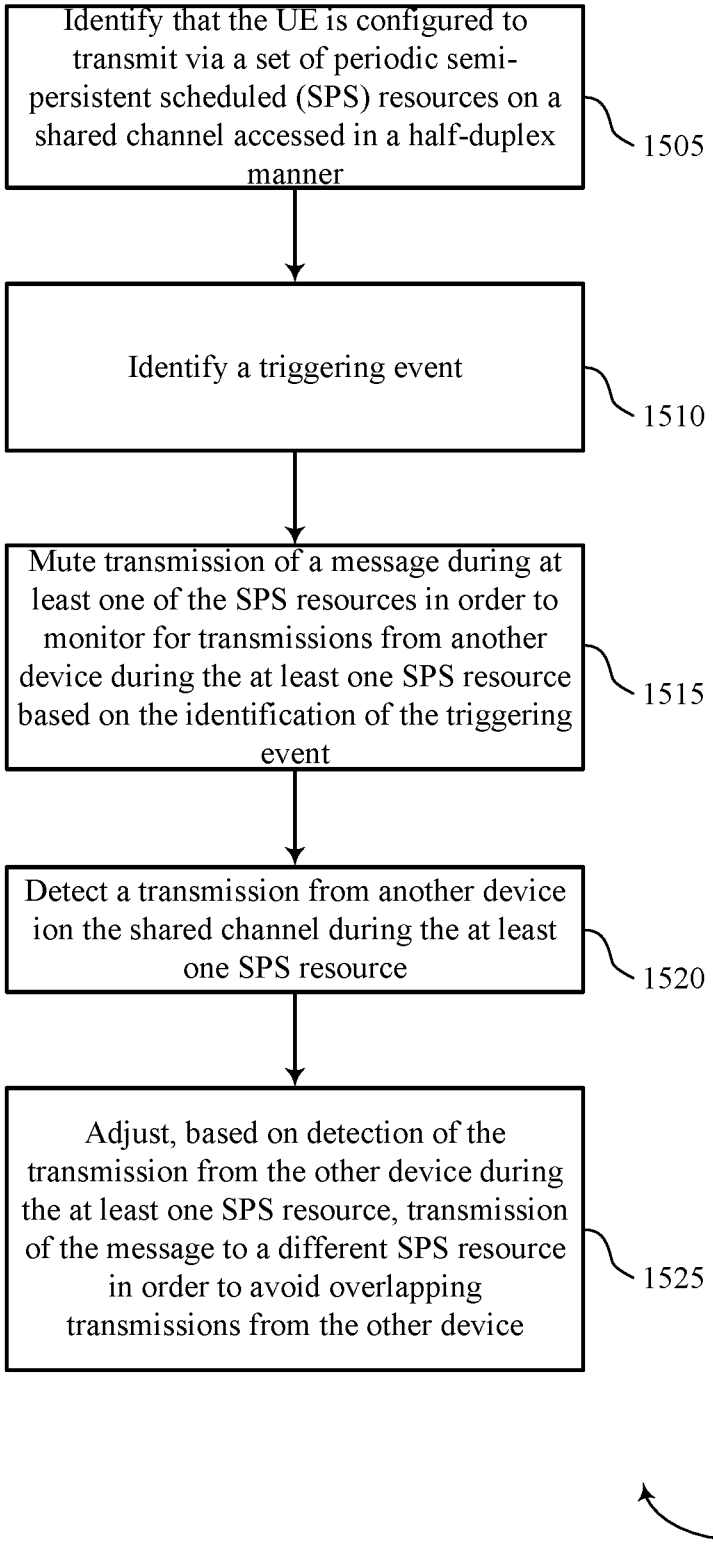

Identify that the UE is configured to transmit via a set of periodic semi-persistent scheduled (SPS) resources on a shared channel accessed in a half-duplex manner
1505
Identify a triggering event
1510
Mute transmission of a message during at least one of the SPS resources in order to monitor for transmissions from another device during the at least one SPS resource based on the identification of the triggering event
1515
Detect a transmission from another device ion the shared channel during the at least one SPS resource
1520
Adjust, based on detection of the transmission from the other device during the at least one SPS resource, transmission of the message to a different SPS resource in order to avoid overlapping transmissions from the other device
1525
1500

FIG. 15

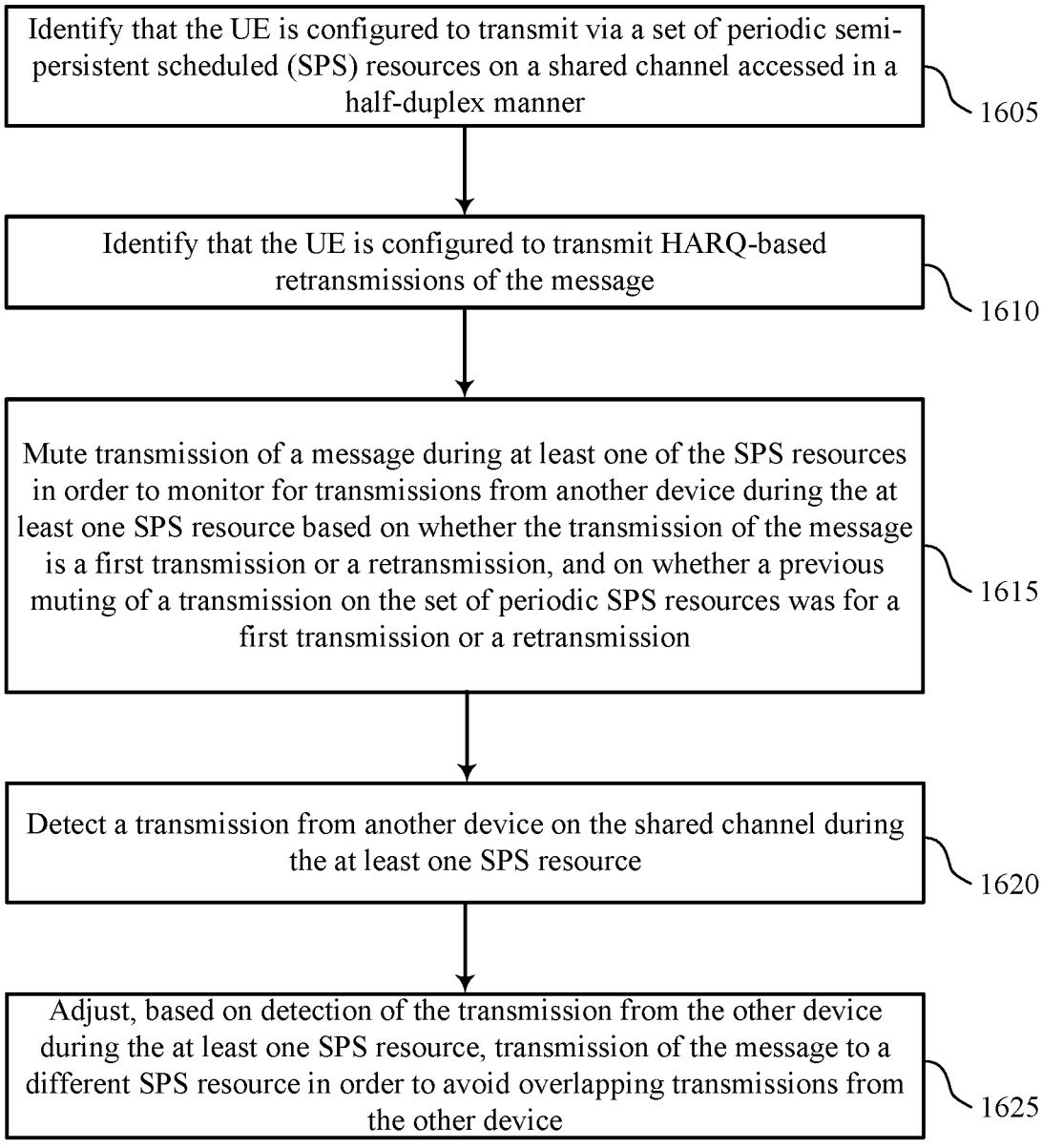

Identify that the UE is configured to transmit via a set of periodic semi-persistent scheduled (SPS) resources on a shared channel accessed in a half-duplex manner
1605
Identify that the UE is configured to transmit HARQ-based retransmissions of the message
1610
Mute transmission of a message during at least one of the SPS resources in order to monitor for transmissions from another device during the at least one SPS resource based on whether the transmission of the message is a first transmission or a retransmission, and on whether a previous muting of a transmission on the set of periodic SPS resources was for a first transmission or a retransmission
1615
Detect a transmission from another device on the shared channel during the at least one SPS resource
1620
Adjust, based on detection of the transmission from the other device during the at least one SPS resource, transmission of the message to a different SPS resource in order to avoid overlapping transmissions from the other device
1625
1600

FIG. 16

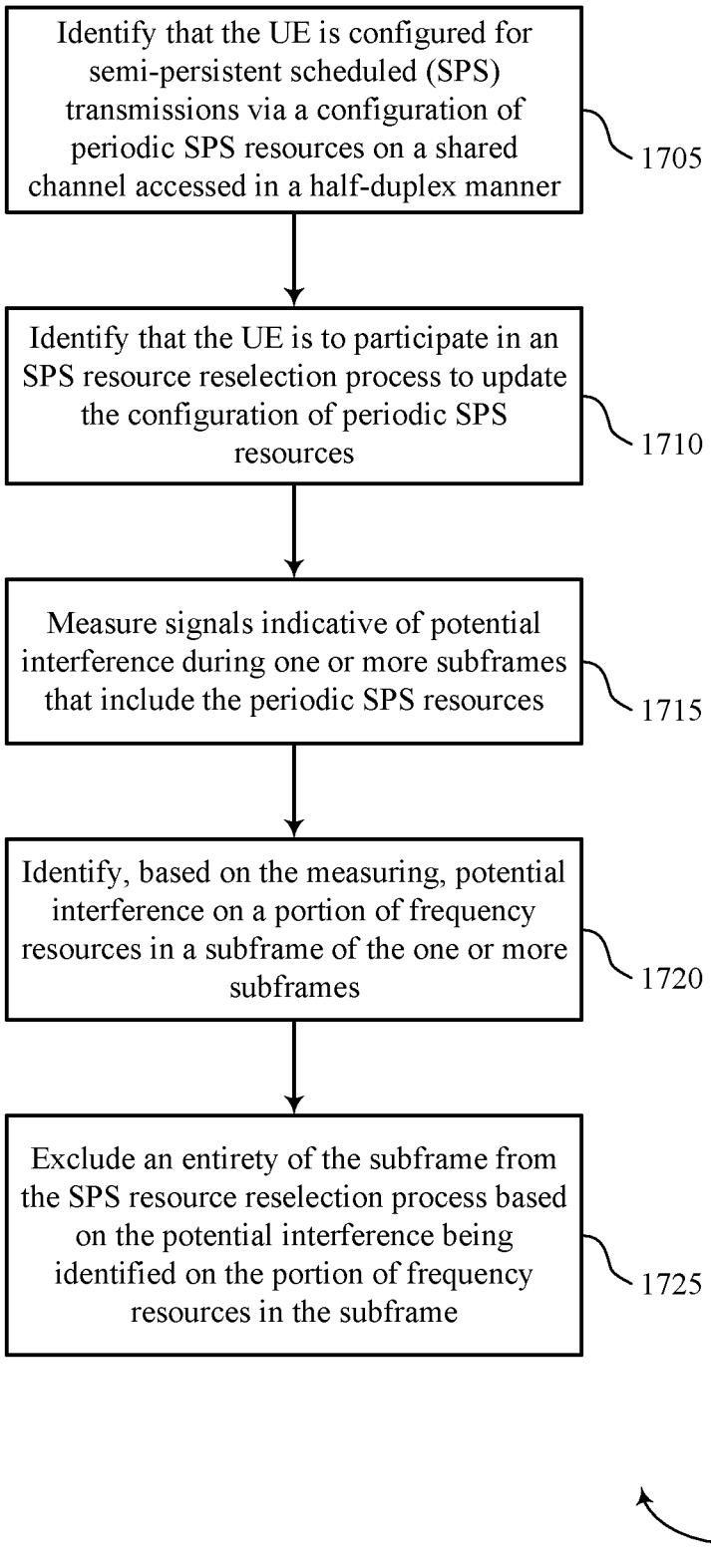

Identify that the UE is configured for semi-persistent scheduled (SPS) transmissions via a configuration of periodic SPS resources on a shared channel accessed in a half-duplex manner
1705
Identify that the UE is to participate in an SPS resource reselection process to update the configuration of periodic SPS resources
1710
Measure signals indicative of potential interference during one or more subframes that include the periodic SPS resources
1715
Identify, based on the measuring, potential interference on a portion of frequency resources in a subframe of the one or more subframes
1720
Exclude an entirety of the subframe from the SPS resource reselection process based on the potential interference being identified on the portion of frequency resources in the subframe
1725
1700

FIG. 17

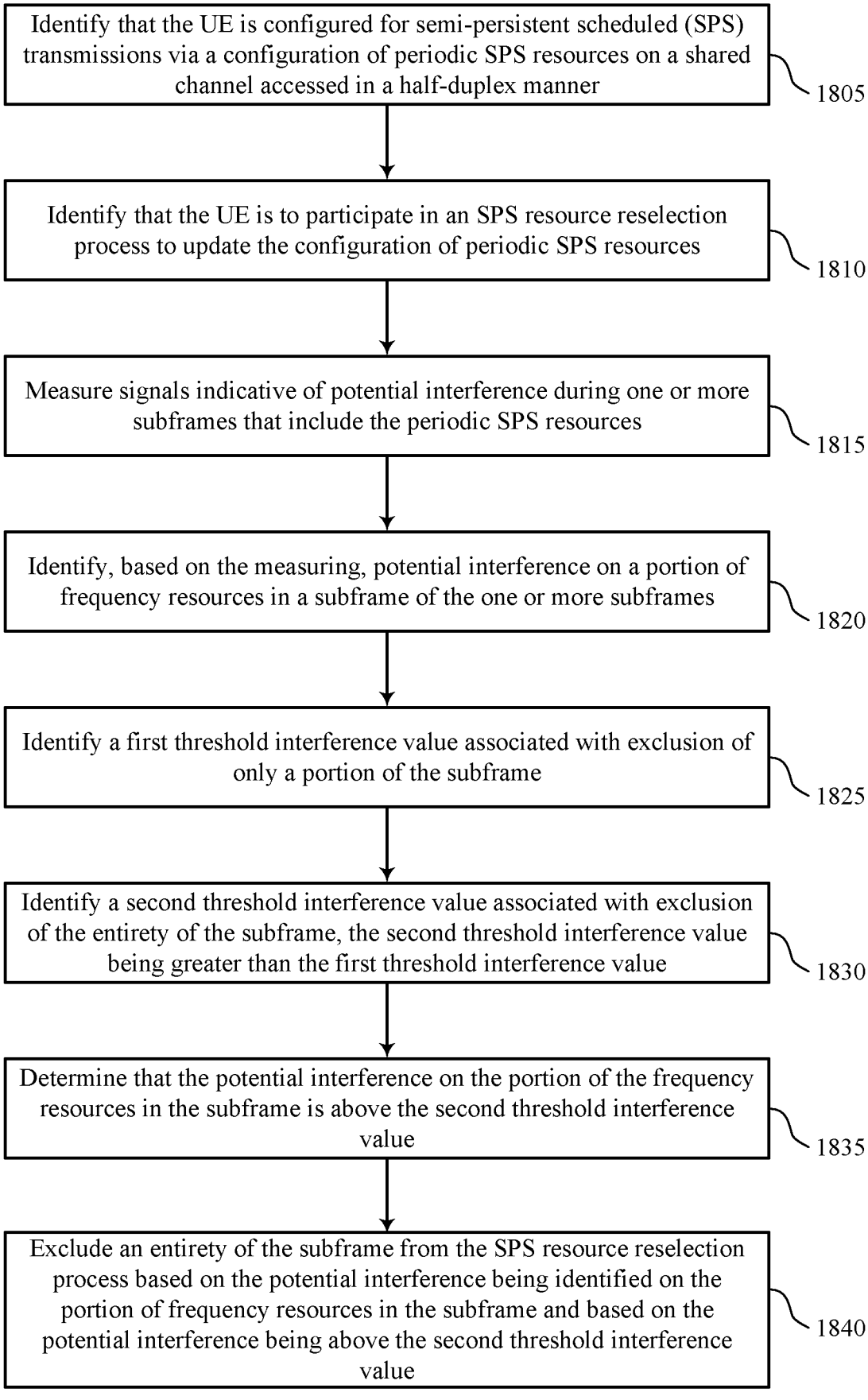

Identify that the UE is configured for semi-persistent scheduled (SPS) transmissions via a configuration of periodic SPS resources on a shared channel accessed in a half-duplex manner
1805
Identify that the UE is to participate in an SPS resource reselection process to update the configuration of periodic SPS resources
1810
Measure signals indicative of potential interference during one or more subframes that include the periodic SPS resources
1815
Identify, based on the measuring, potential interference on a portion of frequency resources in a subframe of the one or more subframes
1820
Identify a first threshold interference value associated with exclusion of only a portion of the subframe
1825
Identify a second threshold interference value associated with exclusion of the entirety of the subframe, the second threshold interference value being greater than the first threshold interference value
1830
Determine that the potential interference on the portion of the frequency resources in the subframe is above the second threshold interference value
1835
Exclude an entirety of the subframe from the SPS resource reselection process based on the potential interference being identified on the portion of frequency resources in the subframe and based on the potential interference being above the second threshold interference value
1840
1800

FIG. 18

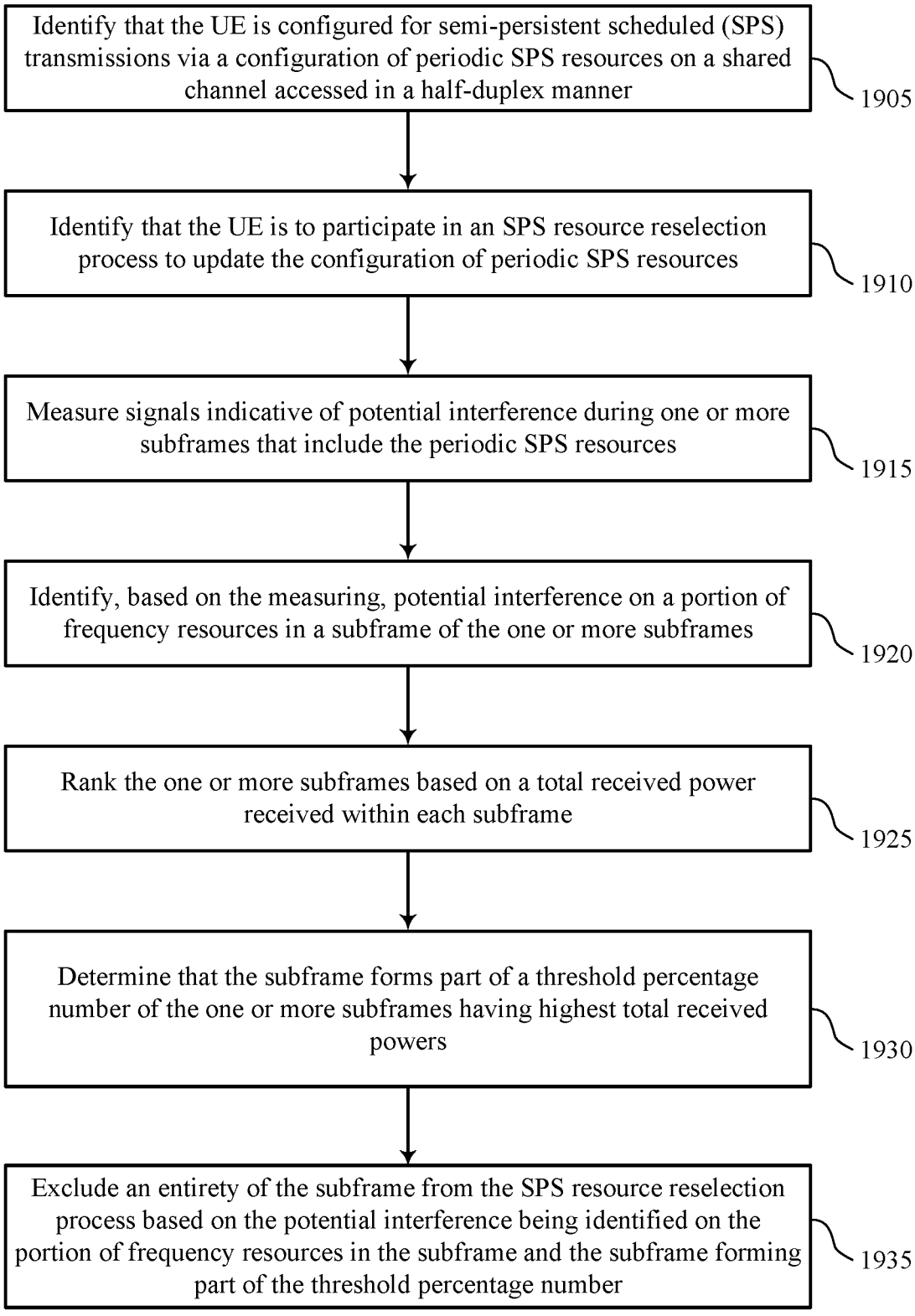

Identify that the UE is configured for semi-persistent scheduled (SPS) transmissions via a configuration of periodic SPS resources on a shared channel accessed in a half-duplex manner
1905
Identify that the UE is to participate in an SPS resource reselection process to update the configuration of periodic SPS resources
1910
Measure signals indicative of potential interference during one or more subframes that include the periodic SPS resources
1915
Identify, based on the measuring, potential interference on a portion of frequency resources in a subframe of the one or more subframes
1920
Rank the one or more subframes based on a total received power received within each subframe
1925
Determine that the subframe forms part of a threshold percentage number of the one or more subframes having highest total received powers
1930
Exclude an entirety of the subframe from the SPS resource reselection process based on the potential interference being identified on the portion of frequency resources in the subframe and the subframe forming part of the threshold percentage number
1935
1900

FIG. 19