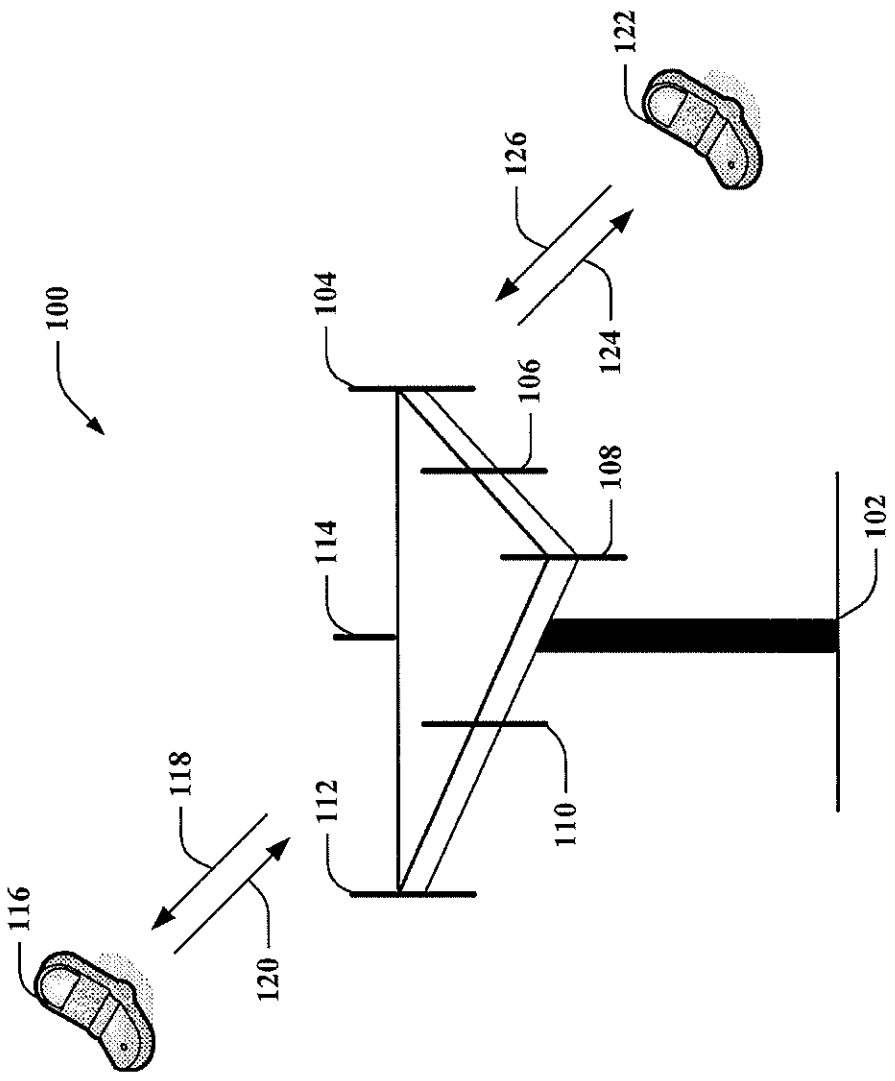


FIG. 1

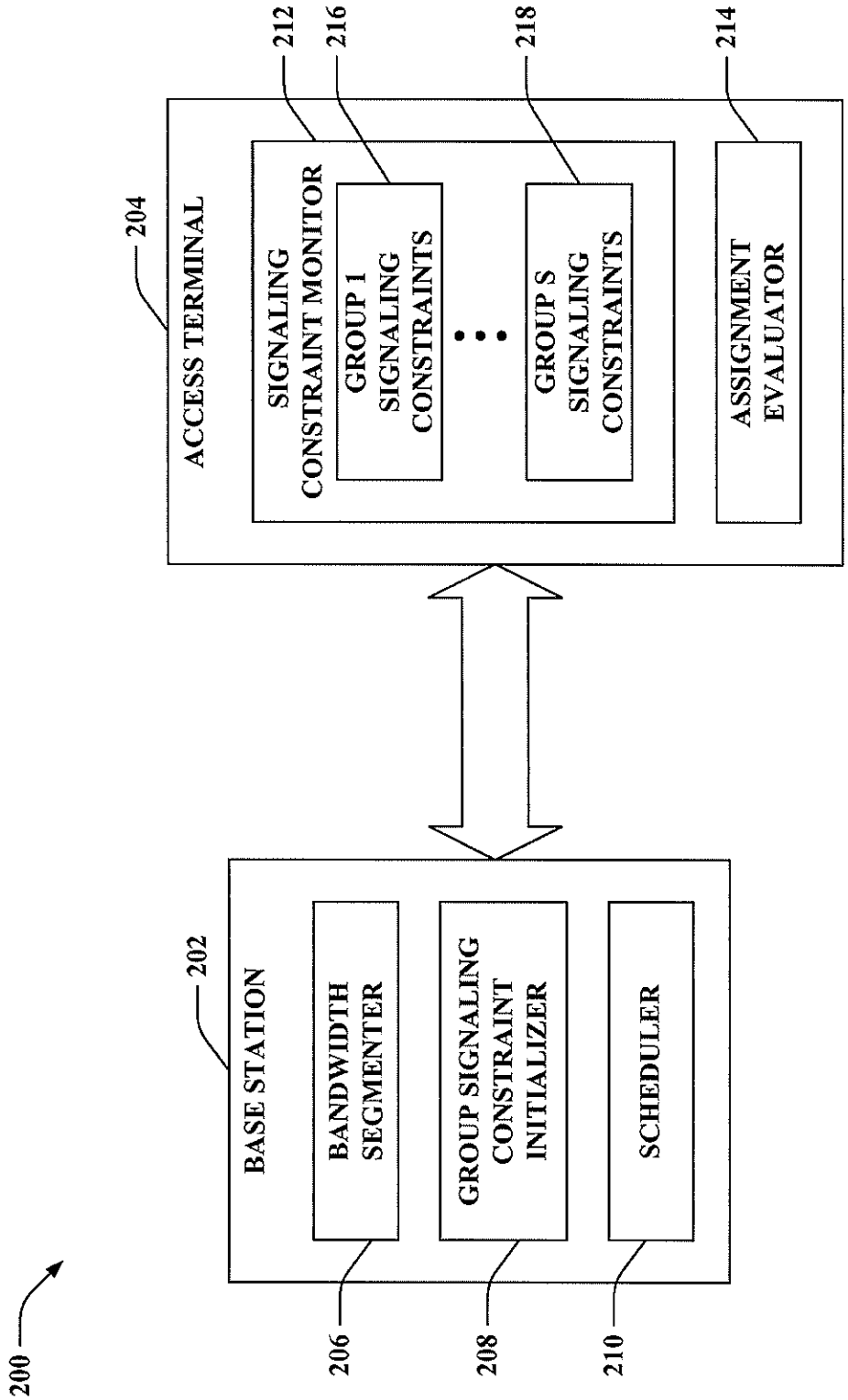

200
202
BASE STATION
BANDWIDTH SEGMENTER
GROUP SIGNALING CONSTRAINT INITIALIZER
SCHEDULER
206
208
210
204
ACCESS TERMINAL
SIGNALING CONSTRAINT MONITOR
GROUP 1 SIGNALING CONSTRAINTS
GROUP S SIGNALING CONSTRAINTS
ASSIGNMENT EVALUATOR
212
216
218
214

FIG. 2

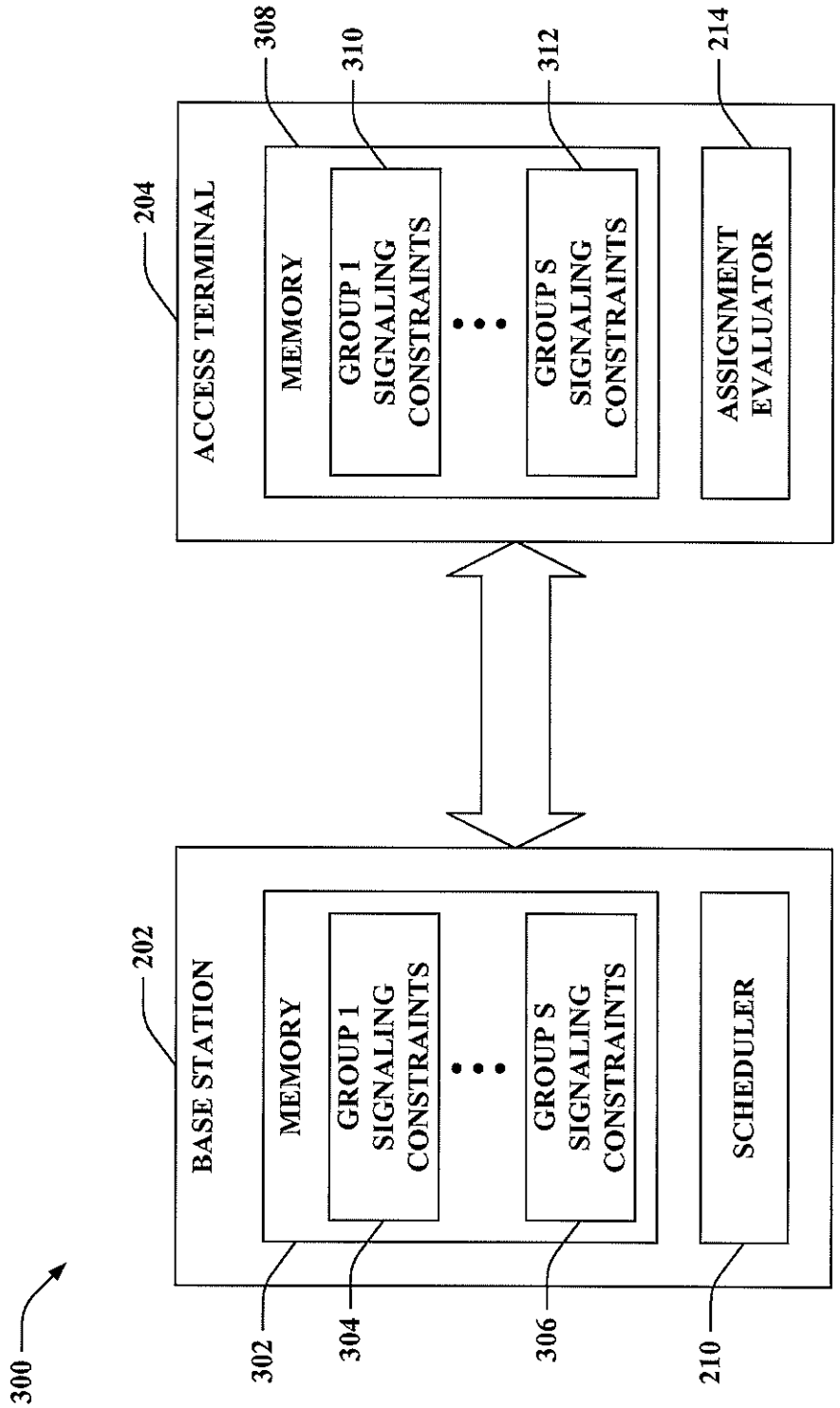

300
202
BASE STATION
MEMORY
GROUP 1 SIGNALING CONSTRAINTS
GROUP S SIGNALING CONSTRAINTS
SCHEDULER
302
304
306
210
204
ACCESS TERMINAL
MEMORY
GROUP 1 SIGNALING CONSTRAINTS
GROUP S SIGNALING CONSTRAINTS
ASSIGNMENT EVALUATOR
308
310
312
214

FIG. 3

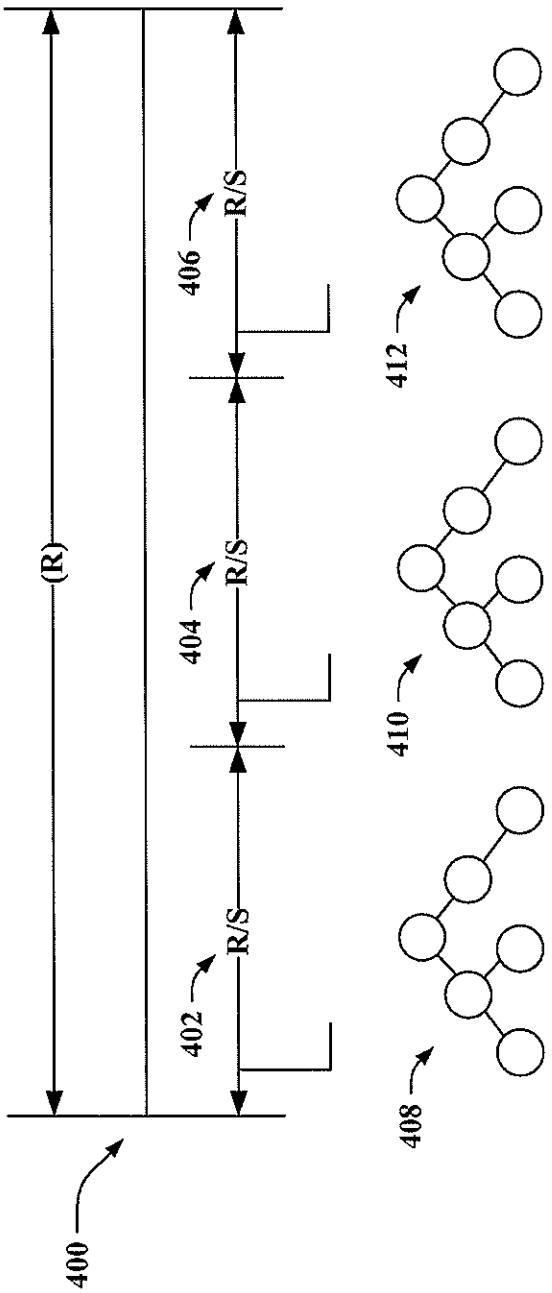


FIG. 4

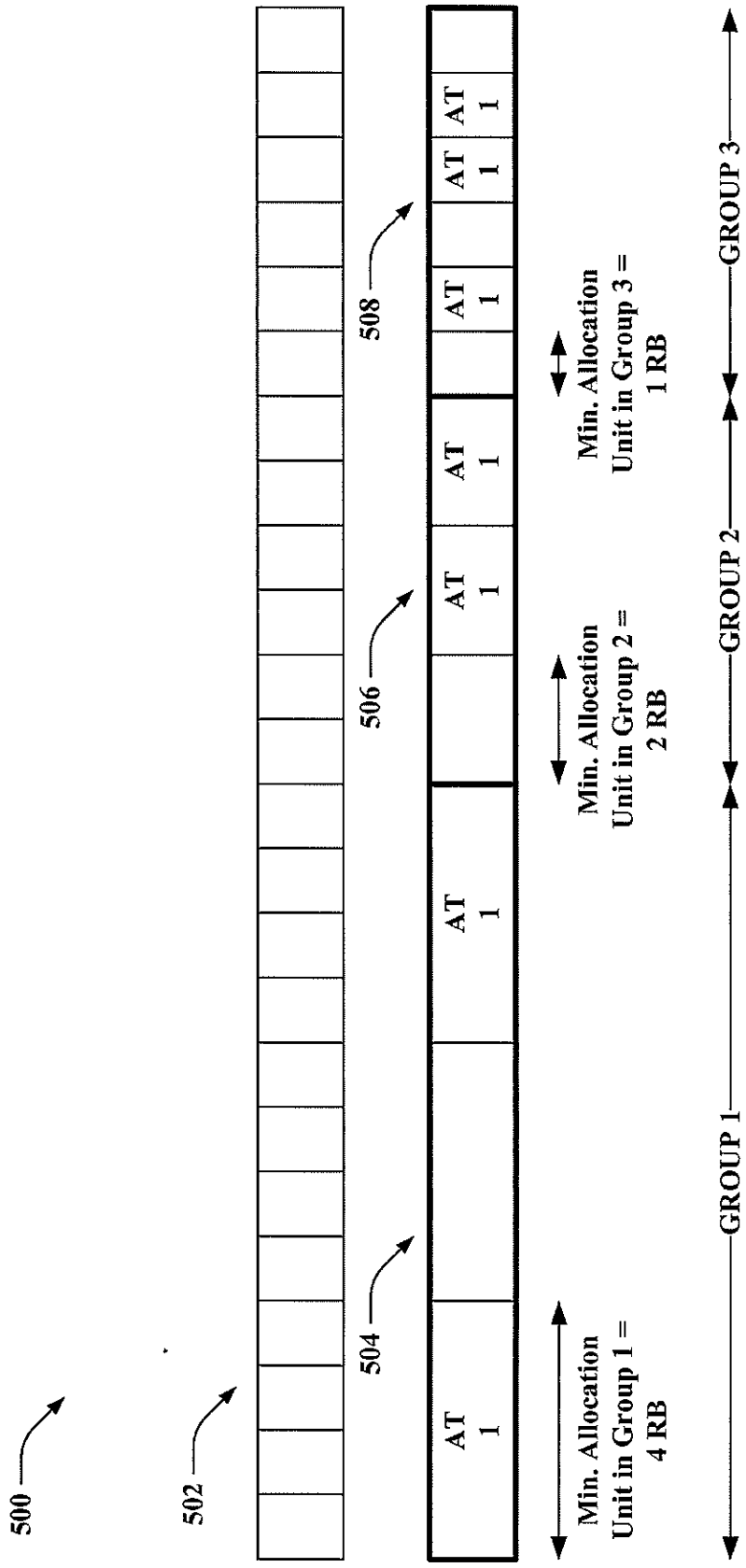

500
502
504
506
508
AT 1
AT 1
AT 1
AT 1
AT 1
AT 1
AT 1
Min. Allocation Unit in Group 1 = 4 RB
Min. Allocation Unit in Group 2 = 2 RB
Min. Allocation Unit in Group 3 = 1 RB
GROUP 1
GROUP 2
GROUP 3

FIG. 5

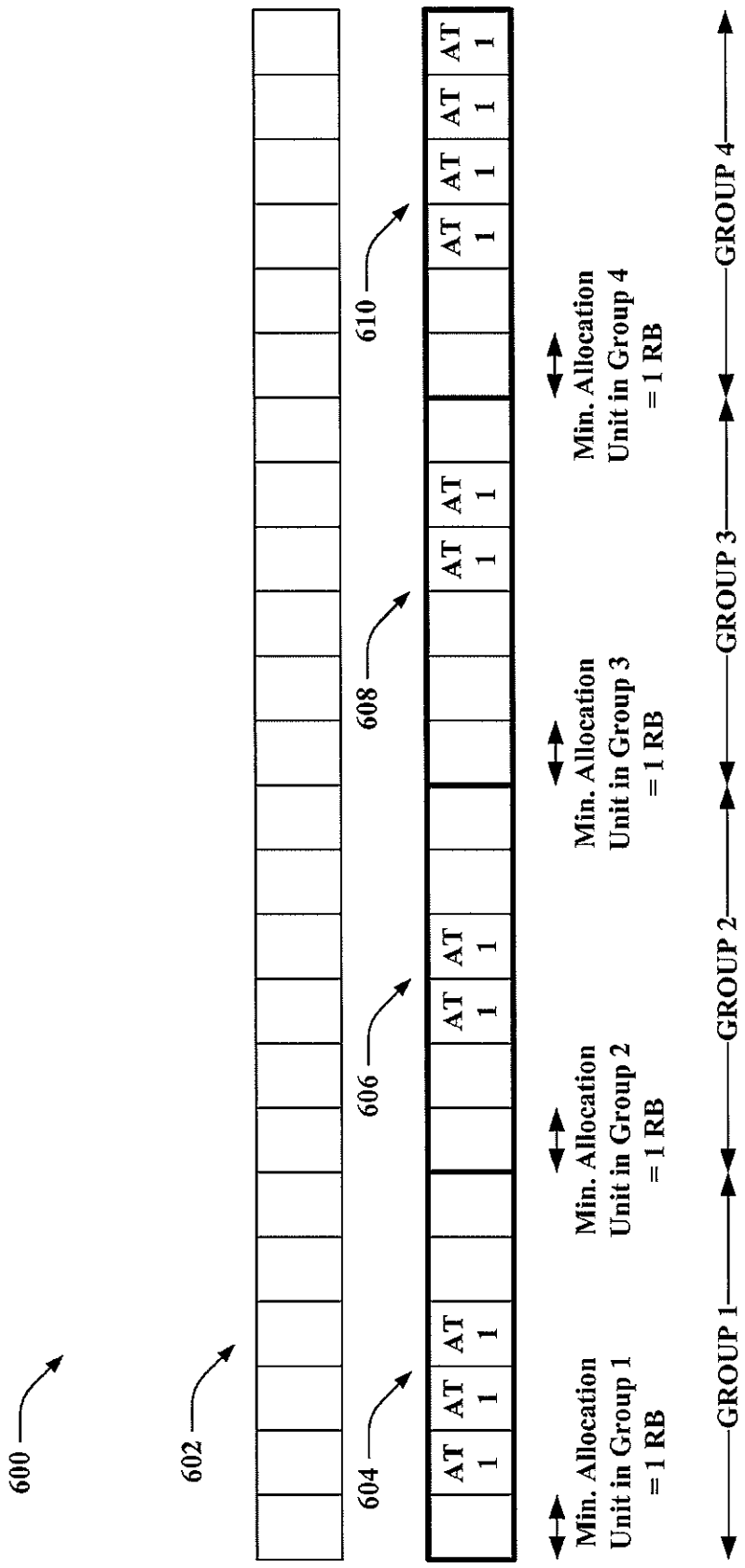

600
602
604
606
608
610
AT 1
Min. Allocation Unit in Group 1 = 1 RB
Min. Allocation Unit in Group 2 = 1 RB
Min. Allocation Unit in Group 3 = 1 RB
Min. Allocation Unit in Group 4 = 1 RB
GROUP 1
GROUP 2
GROUP 3
GROUP 4

FIG. 6

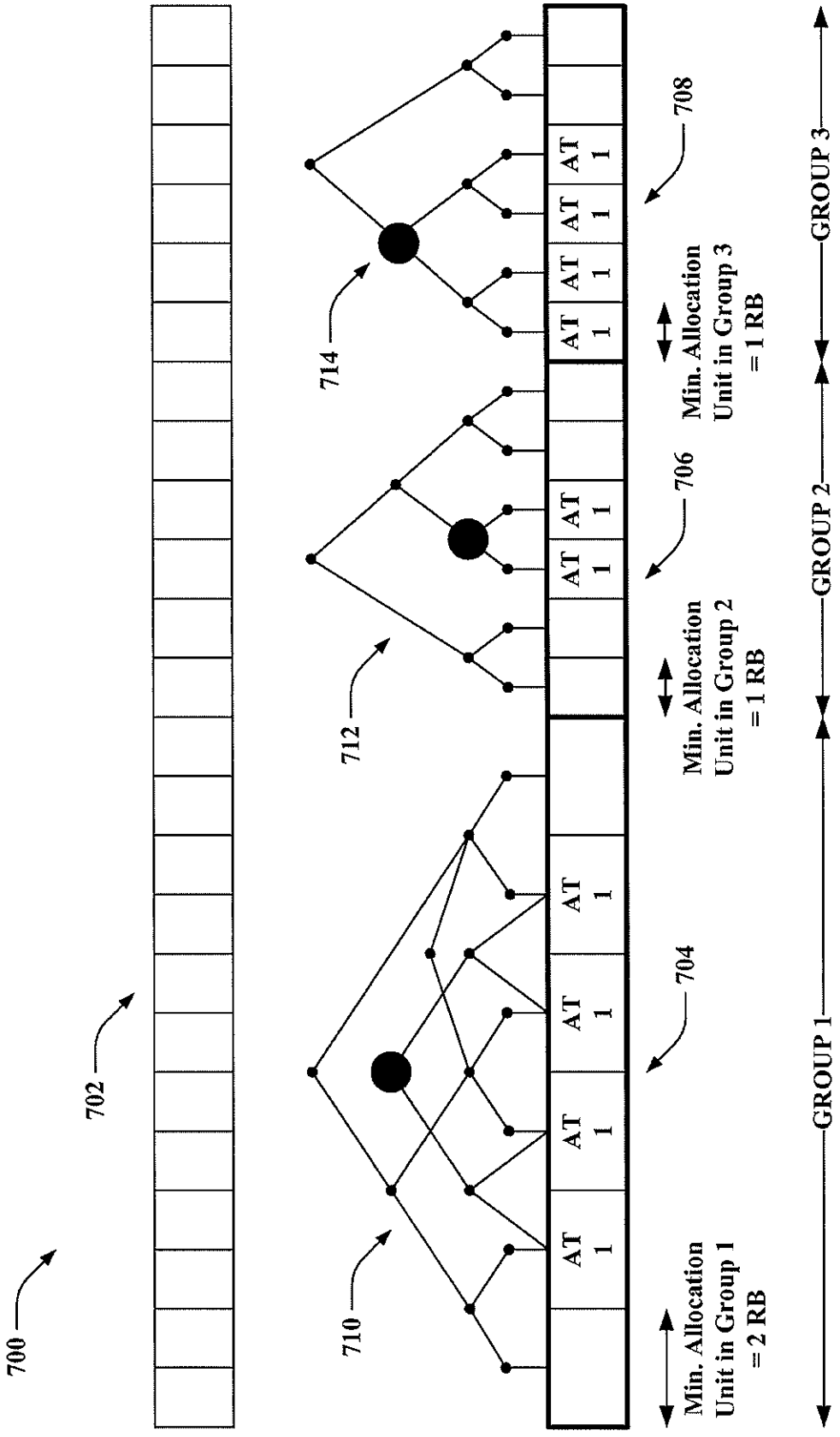

700
702
704
706
708
710
712
714
AT 1
Min. Allocation Unit in Group 1 = 2 RB
Min. Allocation Unit in Group 2 = 1 RB
Min. Allocation Unit in Group 3 = 1 RB
GROUP 1
GROUP 2
GROUP 3

FIG. 7

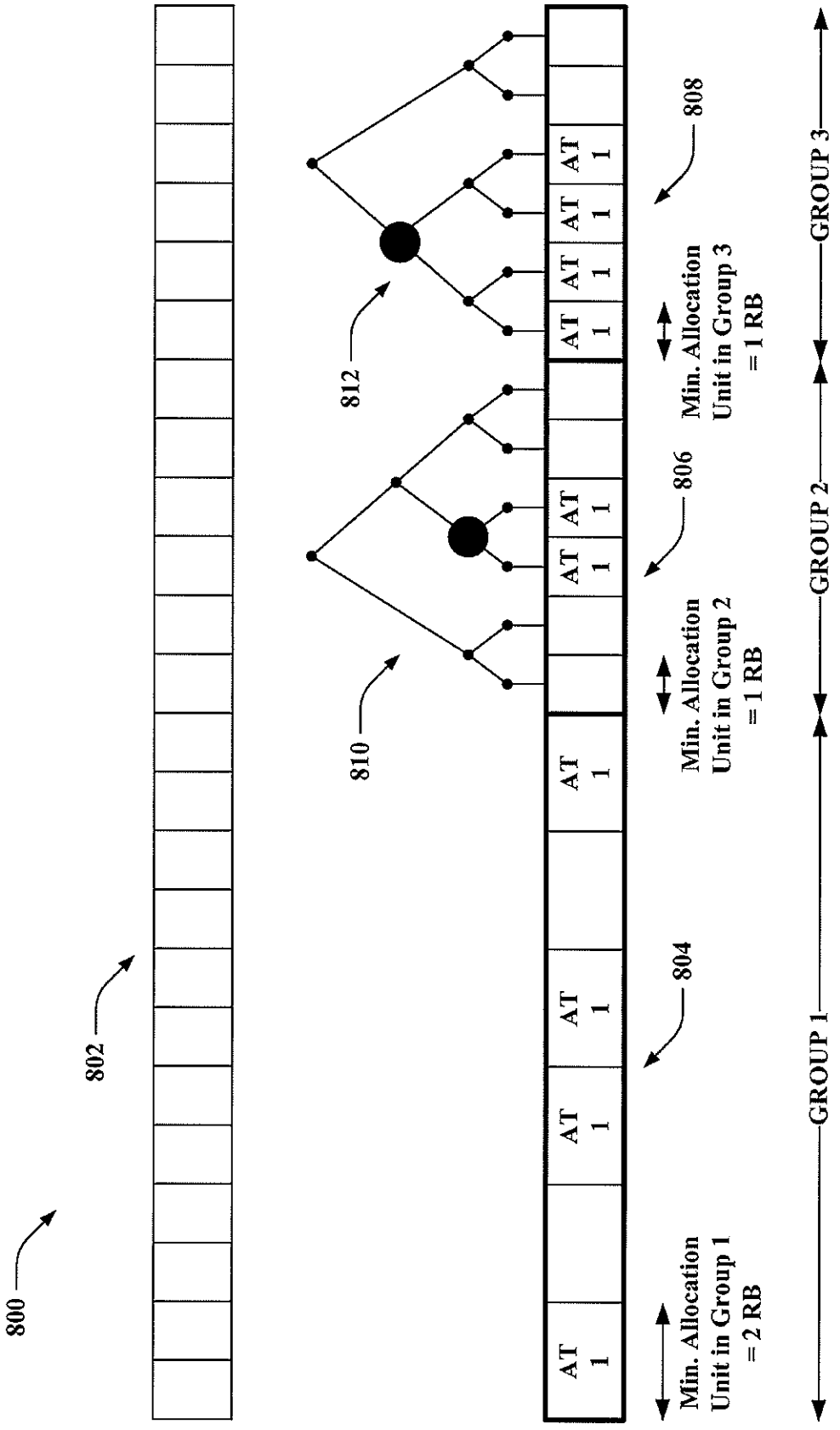

800
802
804
806
808
810
812
AT 1
Min. Allocation Unit in Group 1 = 2 RB
Min. Allocation Unit in Group 2 = 1 RB
Min. Allocation Unit in Group 3 = 1 RB
GROUP 1
GROUP 2
GROUP 3

FIG. 8

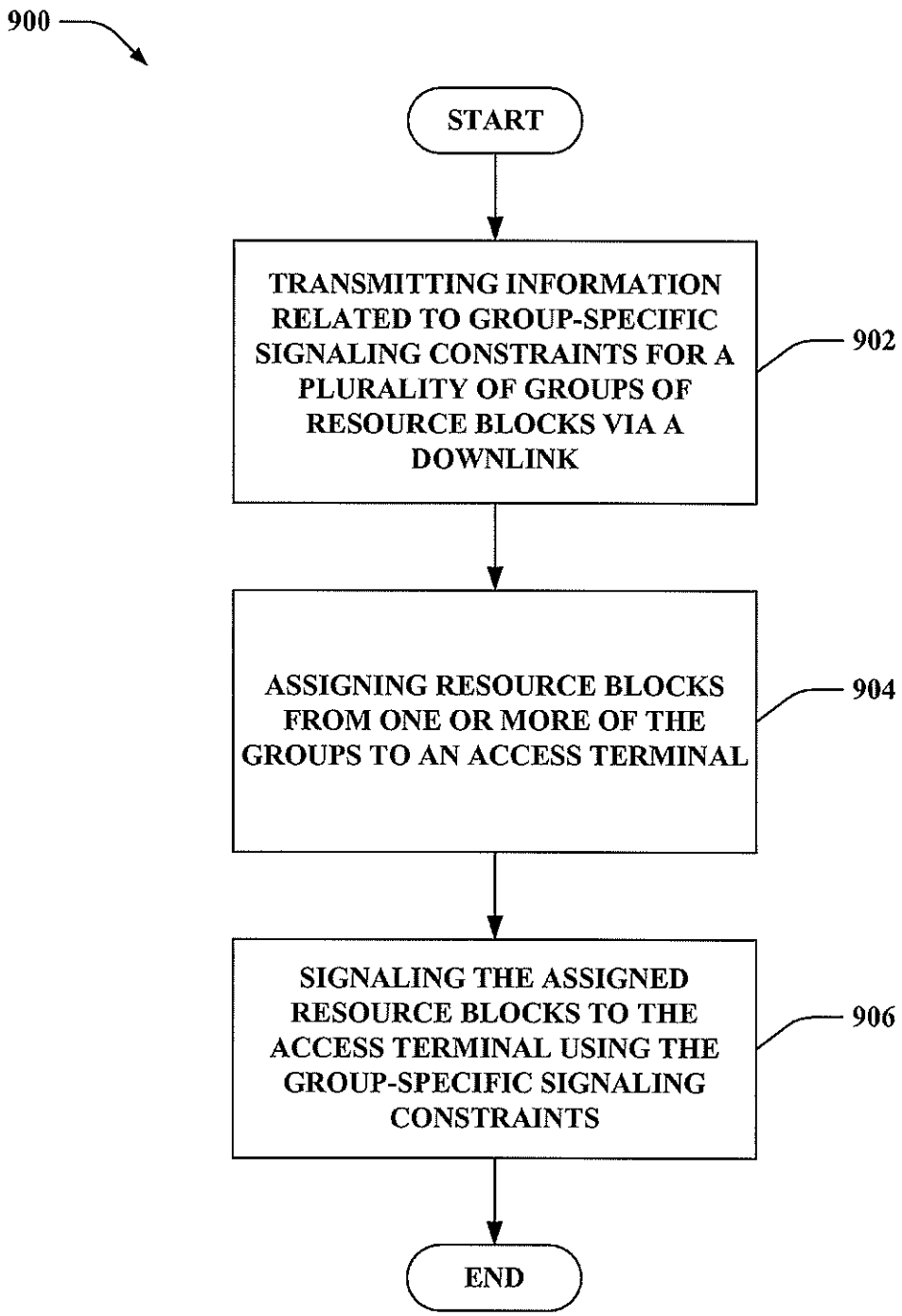

900
START
TRANSMITTING INFORMATION RELATED TO GROUP-SPECIFIC SIGNALING CONSTRAINTS FOR A PLURALITY OF GROUPS OF RESOURCE BLOCKS VIA A DOWNLINK
902
ASSIGNING RESOURCE BLOCKS FROM ONE OR MORE OF THE GROUPS TO AN ACCESS TERMINAL
904
SIGNALING THE ASSIGNED RESOURCE BLOCKS TO THE ACCESS TERMINAL USING THE GROUP-SPECIFIC SIGNALING CONSTRAINTS
906
END

FIG. 9

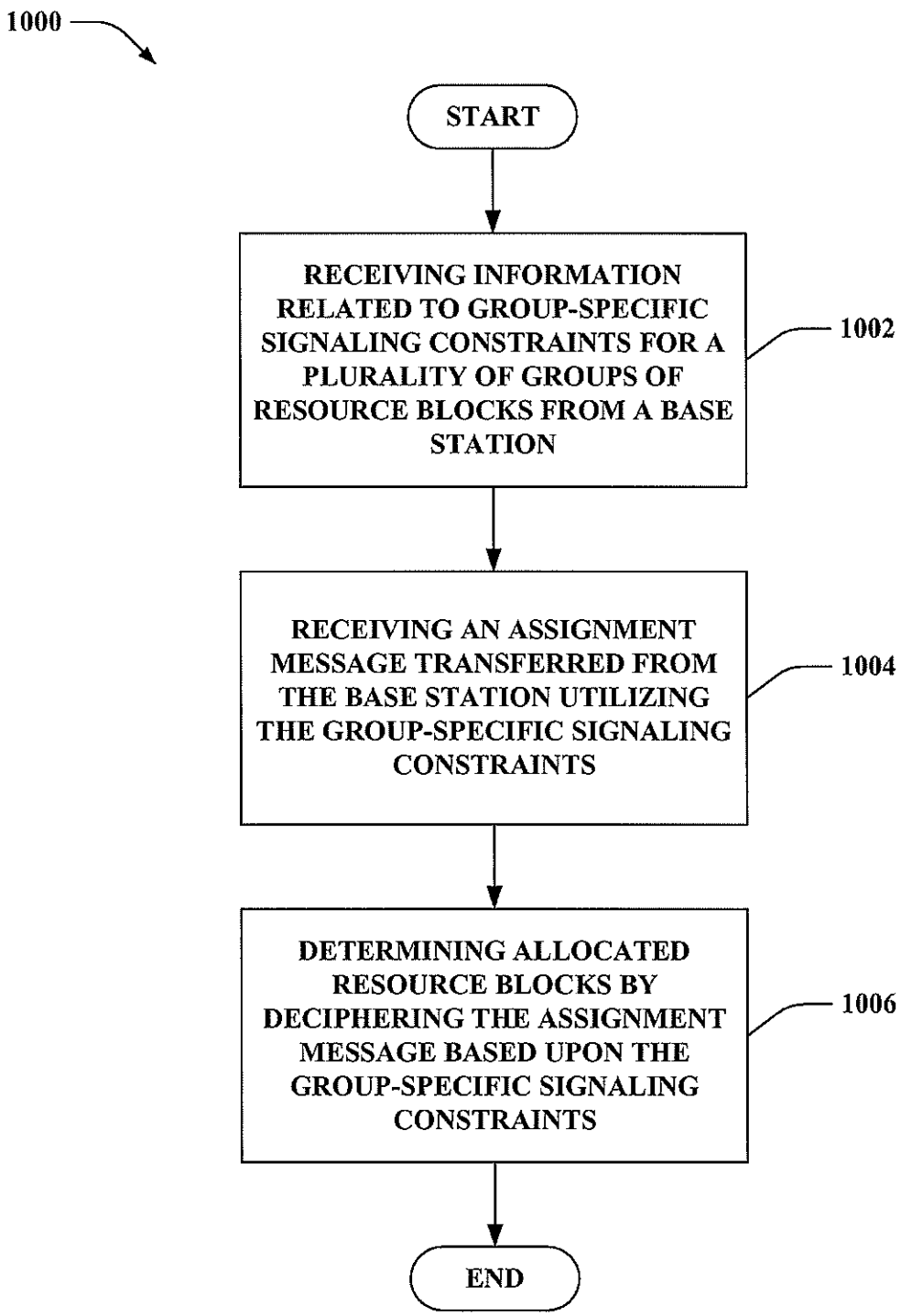

1000
START
RECEIVING INFORMATION RELATED TO GROUP-SPECIFIC SIGNALING CONSTRAINTS FOR A PLURALITY OF GROUPS OF RESOURCE BLOCKS FROM A BASE STATION
1002
RECEIVING AN ASSIGNMENT MESSAGE TRANSFERRED FROM THE BASE STATION UTILIZING THE GROUP-SPECIFIC SIGNALING CONSTRAINTS
1004
DETERMINING ALLOCATED RESOURCE BLOCKS BY DECIPHERING THE ASSIGNMENT MESSAGE BASED UPON THE GROUP-SPECIFIC SIGNALING CONSTRAINTS
1006
END

FIG. 10

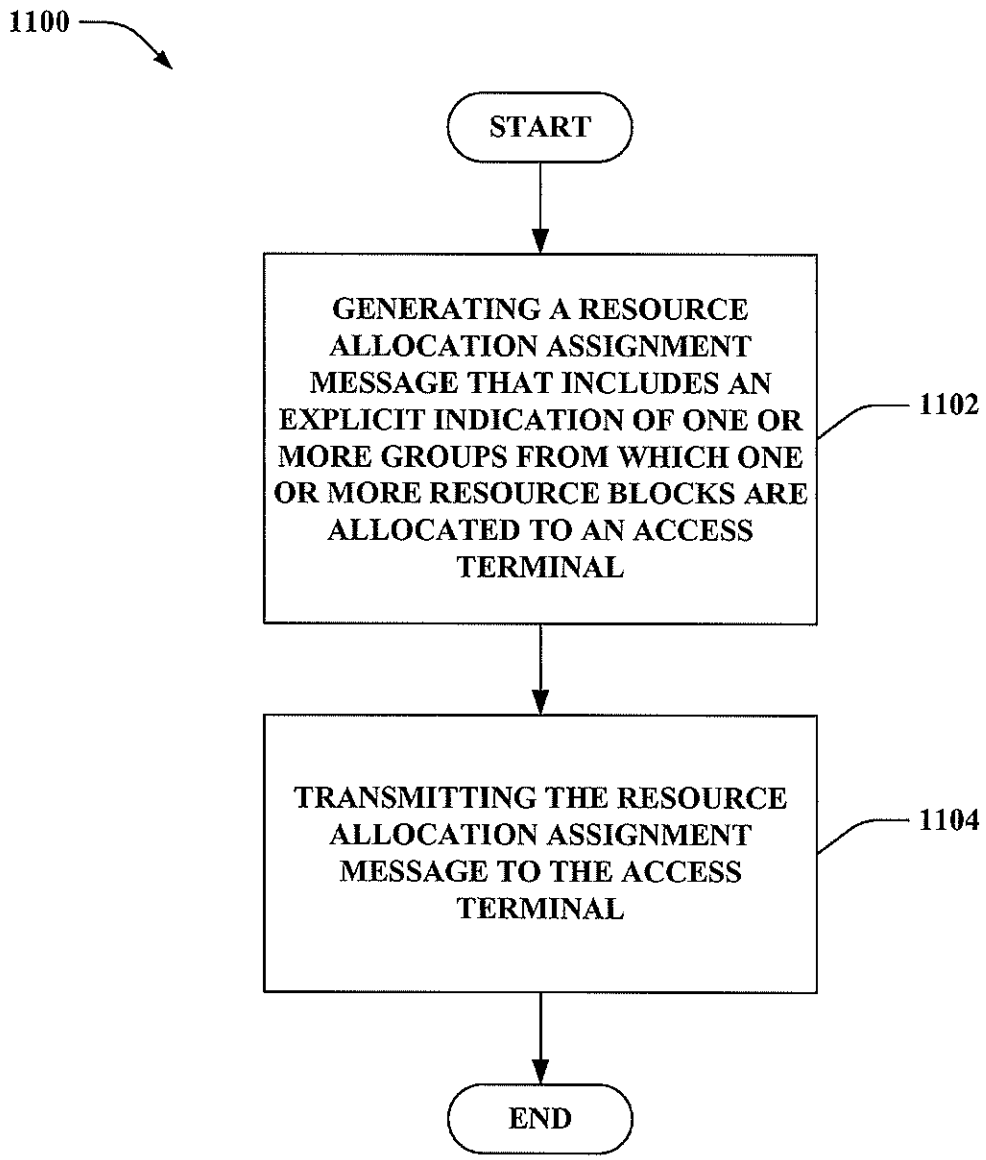

1100
START
GENERATING A RESOURCE ALLOCATION ASSIGNMENT MESSAGE THAT INCLUDES AN EXPLICIT INDICATION OF ONE OR MORE GROUPS FROM WHICH ONE OR MORE RESOURCE BLOCKS ARE ALLOCATED TO AN ACCESS TERMINAL
1102
TRANSMITTING THE RESOURCE ALLOCATION ASSIGNMENT MESSAGE TO THE ACCESS TERMINAL
1104
END

FIG. 11

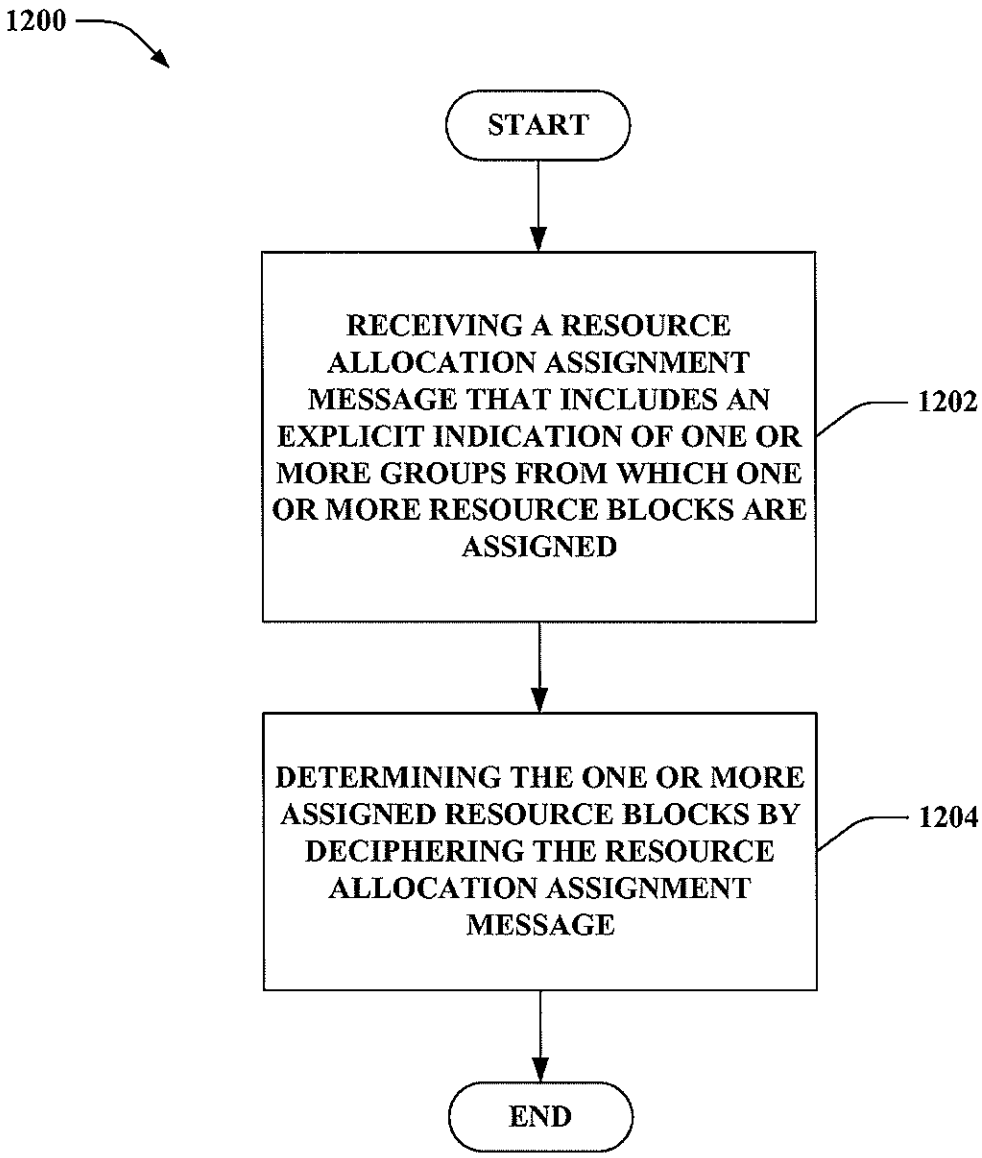

1200
START
RECEIVING A RESOURCE ALLOCATION ASSIGNMENT MESSAGE THAT INCLUDES AN EXPLICIT INDICATION OF ONE OR MORE GROUPS FROM WHICH ONE OR MORE RESOURCE BLOCKS ARE ASSIGNED
1202
DETERMINING THE ONE OR MORE ASSIGNED RESOURCE BLOCKS BY DECIPHERING THE RESOURCE ALLOCATION ASSIGNMENT MESSAGE
1204
END

FIG. 12

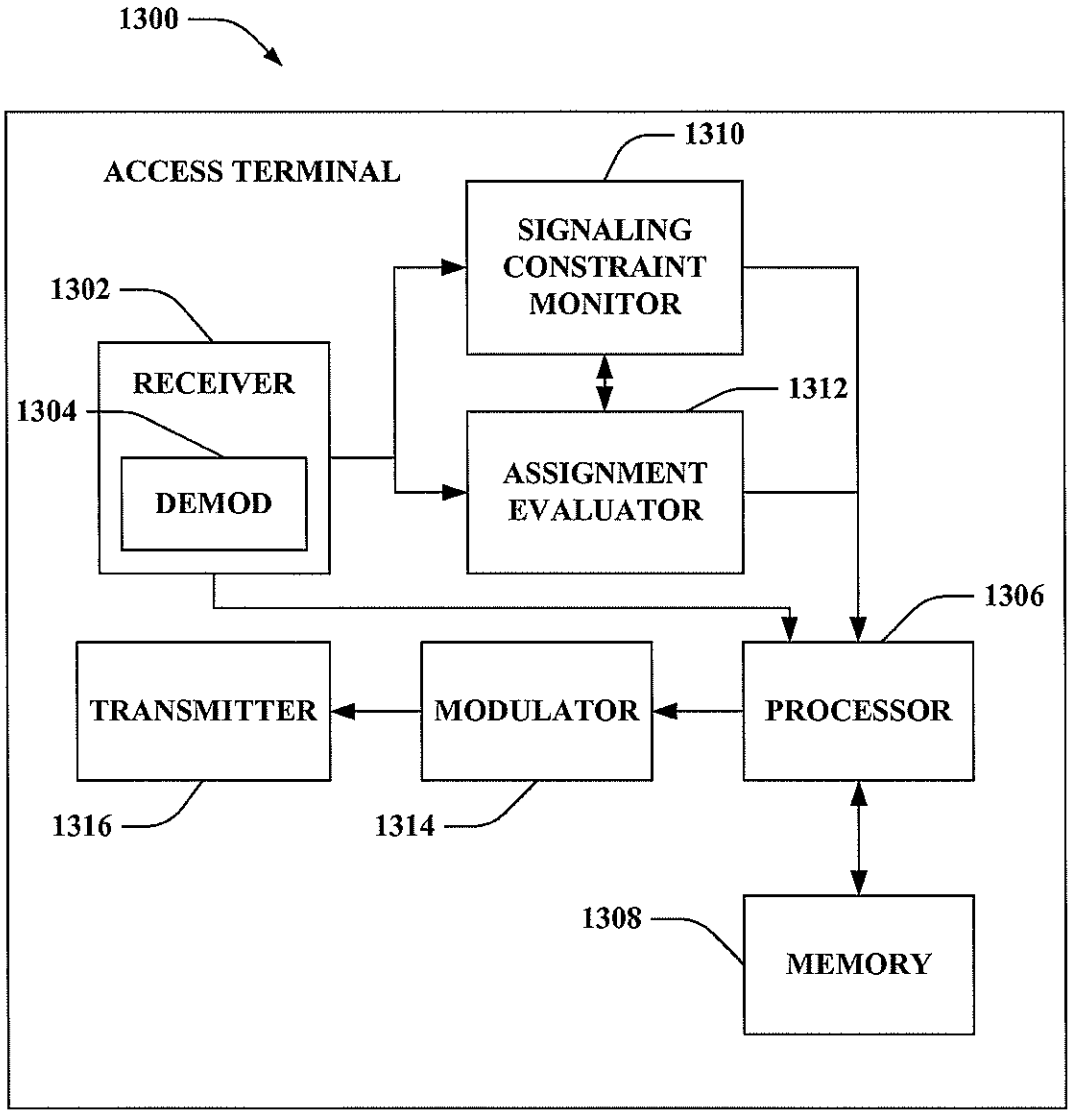

1300
ACCESS TERMINAL
1310
SIGNALING CONSTRAINT MONITOR
1302
RECEIVER
1304
DEMOD
1312
ASSIGNMENT EVALUATOR
1306
TRANSMITTER
MODULATOR
PROCESSOR
1316
1314
1308
MEMORY

FIG. 13

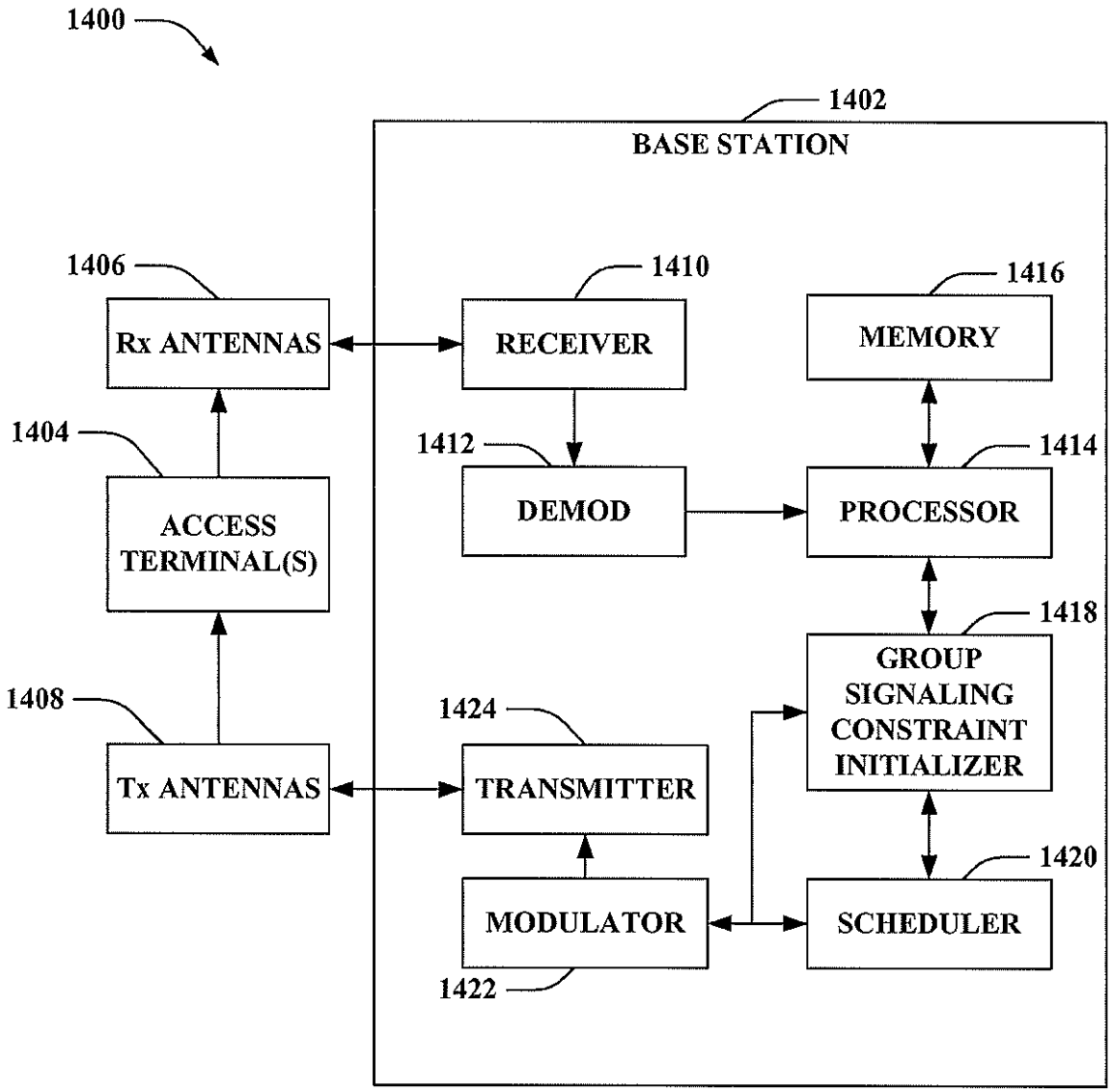

1400
1402
BASE STATION
1406
Rx ANTENNAS
1410
RECEIVER
1416
MEMORY
1404
ACCESS TERMINAL(S)
1412
DEMOD
1414
PROCESSOR
1418
GROUP SIGNALING CONSTRAINT INITIALIZER
1408
Tx ANTENNAS
1424
TRANSMITTER
1420
SCHEDULER
MODULATOR
1422

FIG. 14

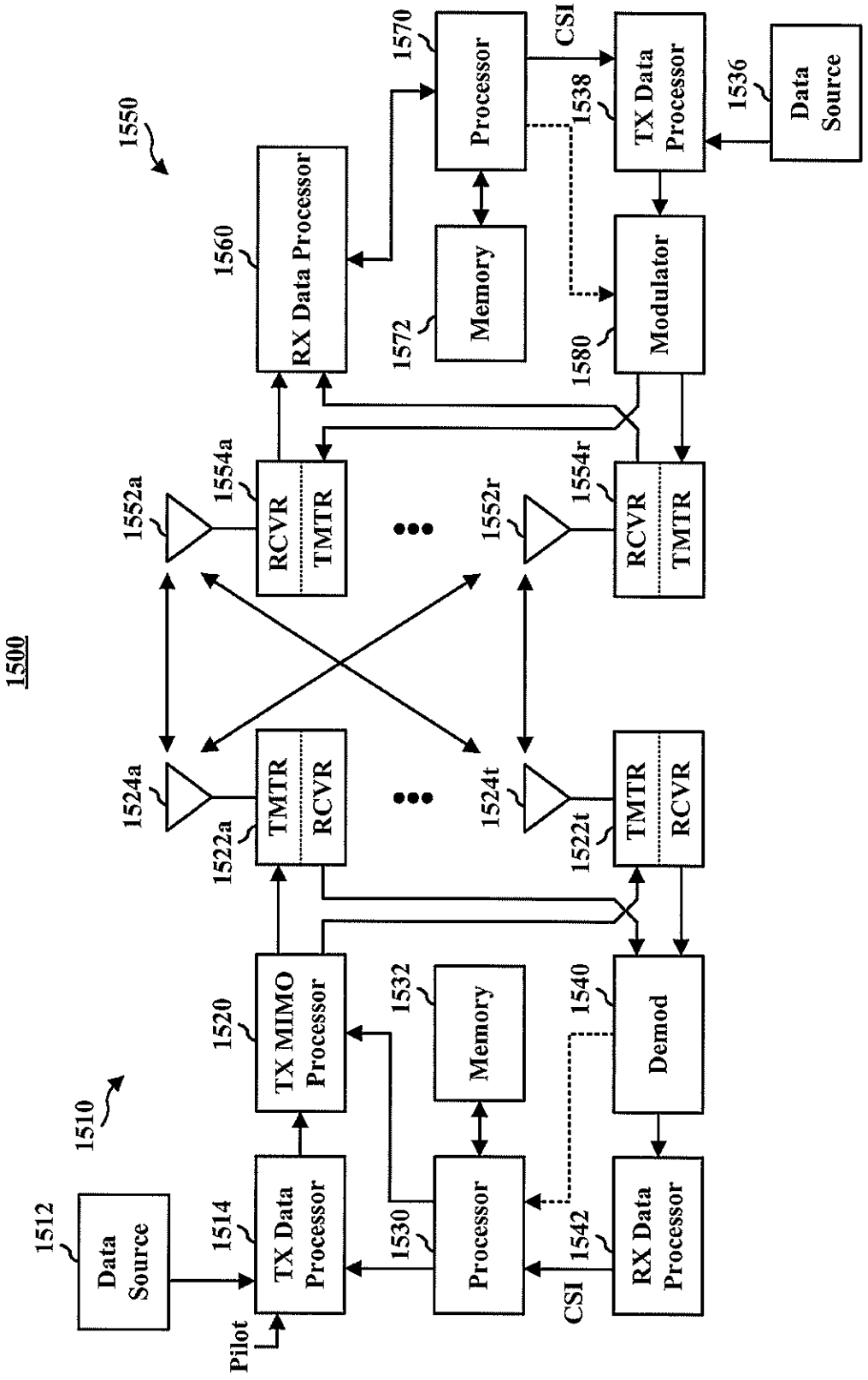

1500
1510
1512
Data Source
1514
TX Data Processor
Pilot
1520
TX MIMO Processor
1522a
TMTR
RCVR
1524a
1530
Processor
1532
Memory
1540
Demod
1542
RX Data Processor
CSI
1522t
TMTR
RCVR
1524t
1550
1552a
1554a
RCVR
TMTR
1552r
1554r
RCVR
TMTR
1560
RX Data Processor
1570
Processor
1572
Memory
1580
Modulator
CSI
1538
TX Data Processor
1536
Data Source

FIG. 15

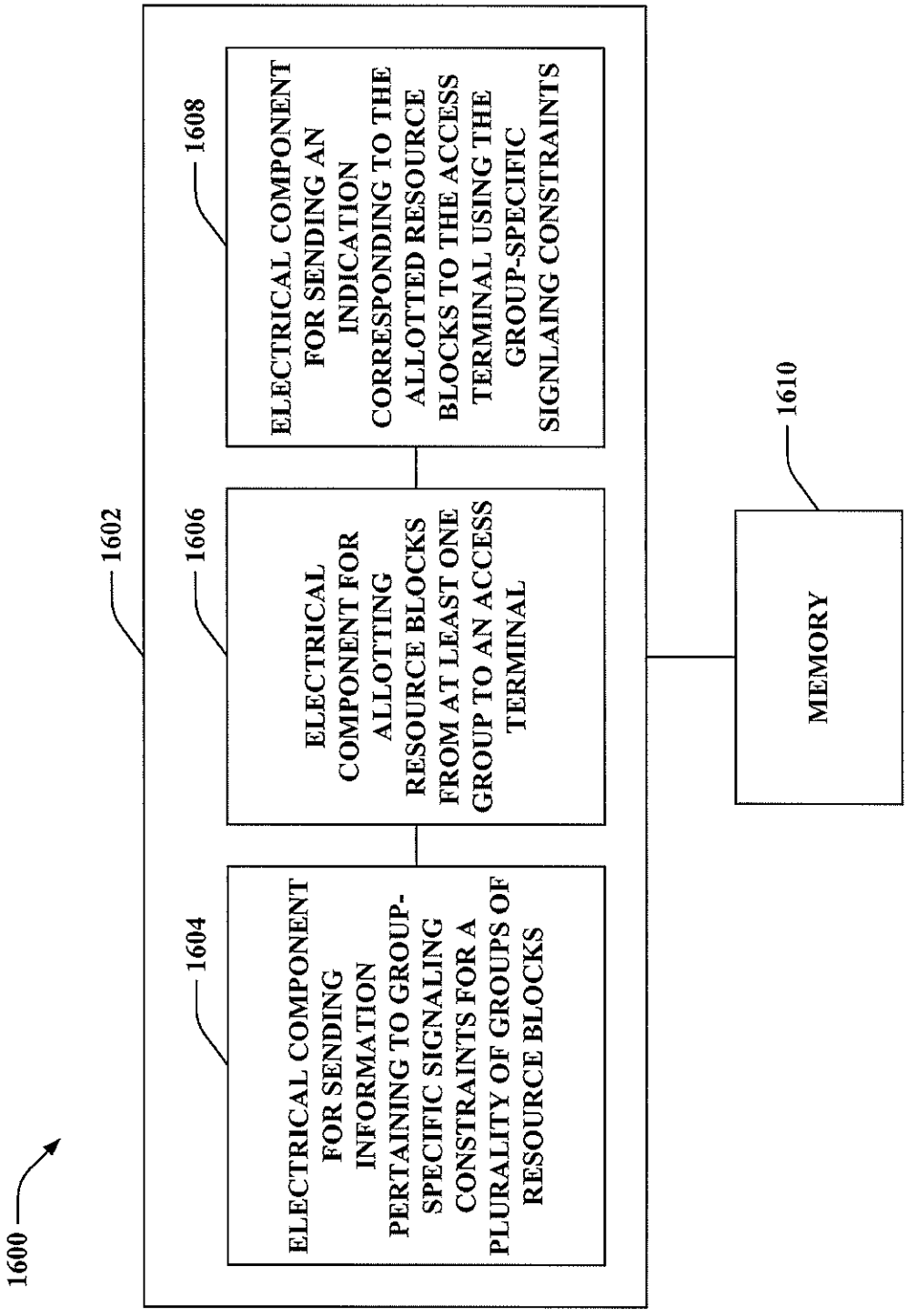

1600
1602
1604
ELECTRICAL COMPONENT FOR SENDING INFORMATION PERTAINING TO GROUP-SPECIFIC SIGNALING CONSTRAINTS FOR A PLURALITY OF GROUPS OF RESOURCE BLOCKS
1606
ELECTRICAL COMPONENT FOR ALLOTTING RESOURCE BLOCKS FROM AT LEAST ONE GROUP TO AN ACCESS TERMINAL
1608
ELECTRICAL COMPONENT FOR SENDING AN INDICATION CORRESPONDING TO THE ALLOTTED RESOURCE BLOCKS TO THE ACCESS TERMINAL USING THE GROUP-SPECIFIC SIGNLAING CONSTRAINTS
1610
MEMORY

FIG. 16

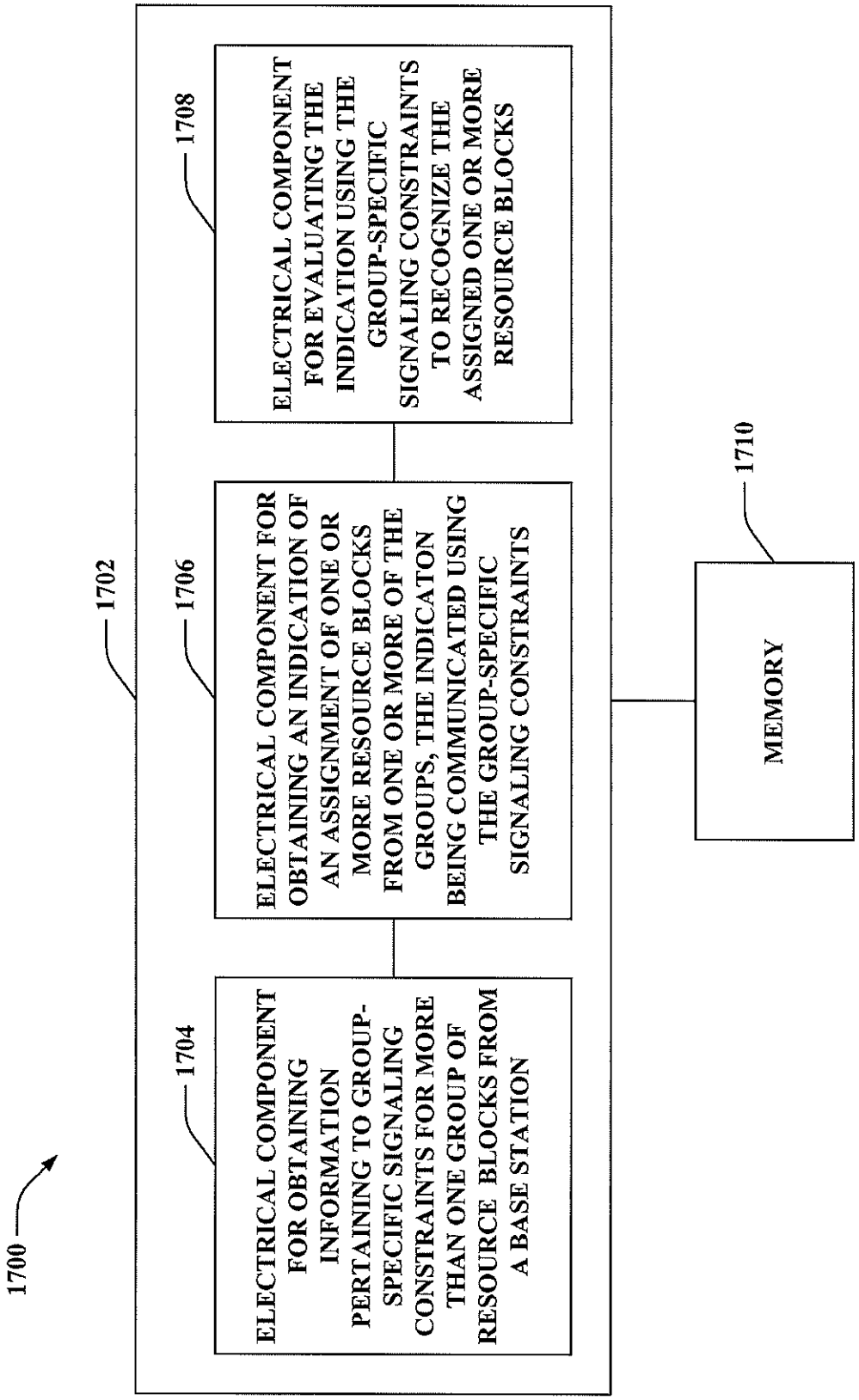

1700
1702
1704
ELECTRICAL COMPONENT FOR OBTAINING INFORMATION PERTAINING TO GROUP-SPECIFIC SIGNALING CONSTRAINTS FOR MORE THAN ONE GROUP OF RESOURCE BLOCKS FROM A BASE STATION
1706
ELECTRICAL COMPONENT FOR OBTAINING AN INDICATION OF AN ASSIGNMENT OF ONE OR MORE RESOURCE BLOCKS FROM ONE OR MORE OF THE GROUPS, THE INDICATON BEING COMMUNICATED USING THE GROUP-SPECIFIC SIGNALING CONSTRAINTS
1708
ELECTRICAL COMPONENT FOR EVALUATING THE INDICATION USING THE GROUP-SPECIFIC SIGNALING CONSTRAINTS TO RECOGNIZE THE ASSIGNED ONE OR MORE RESOURCE BLOCKS
1710
MEMORY

FIG. 17

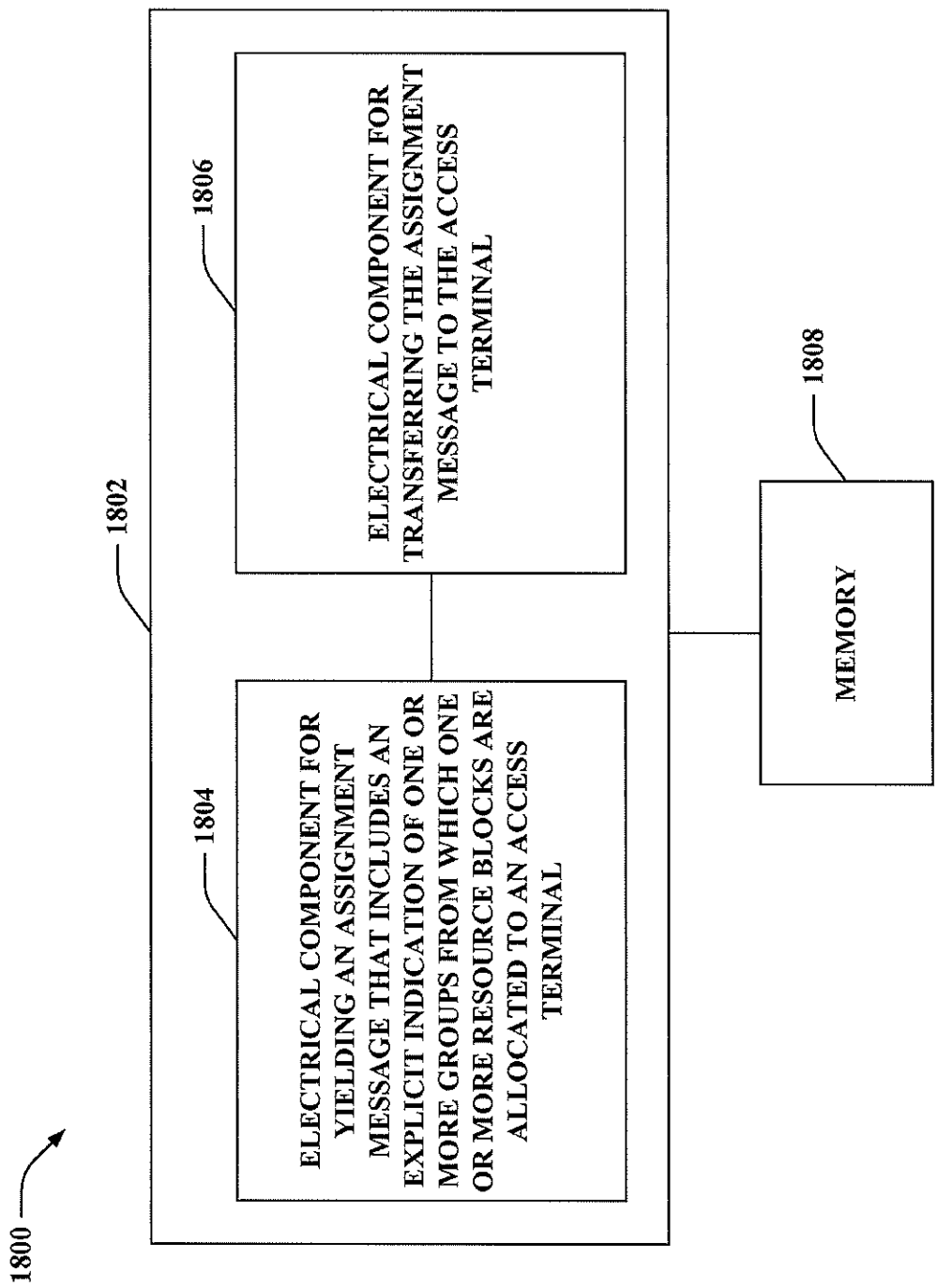

1800
1802
1804
ELECTRICAL COMPONENT FOR YIELDING AN ASSIGNMENT MESSAGE THAT INCLUDES AN EXPLICIT INDICATION OF ONE OR MORE GROUPS FROM WHICH ONE OR MORE RESOURCE BLOCKS ARE ALLOCATED TO AN ACCESS TERMINAL
1806
ELECTRICAL COMPONENT FOR TRANSFERRING THE ASSIGNMENT MESSAGE TO THE ACCESS TERMINAL
1808
MEMORY

FIG. 18

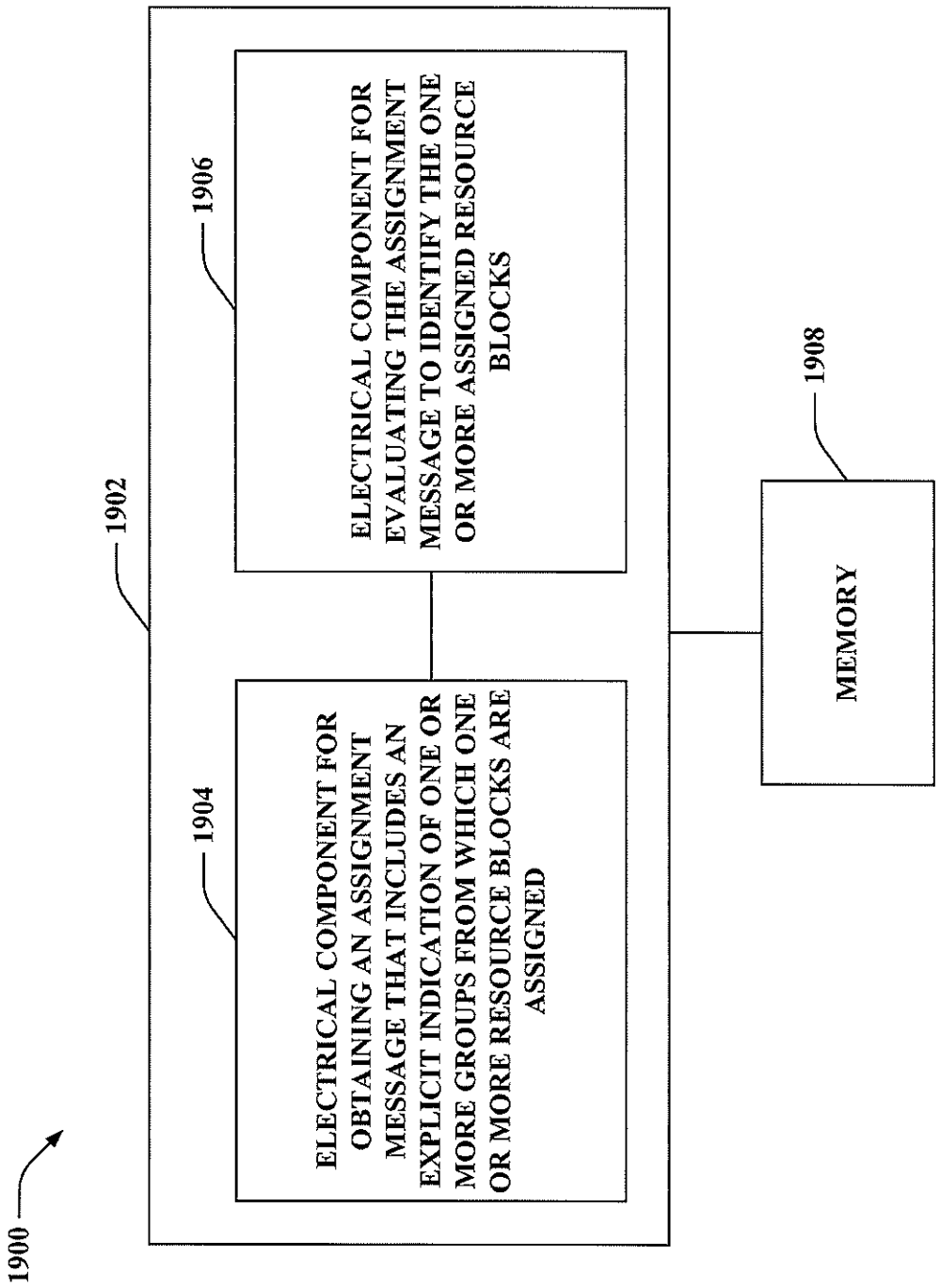

1900
1902
1904
ELECTRICAL COMPONENT FOR OBTAINING AN ASSIGNMENT MESSAGE THAT INCLUDES AN EXPLICIT INDICATION OF ONE OR MORE GROUPS FROM WHICH ONE OR MORE RESOURCE BLOCKS ARE ASSIGNED
1906
ELECTRICAL COMPONENT FOR EVALUATING THE ASSIGNMENT MESSAGE TO IDENTIFY THE ONE OR MORE ASSIGNED RESOURCE BLOCKS
1908
MEMORY

FIG. 19