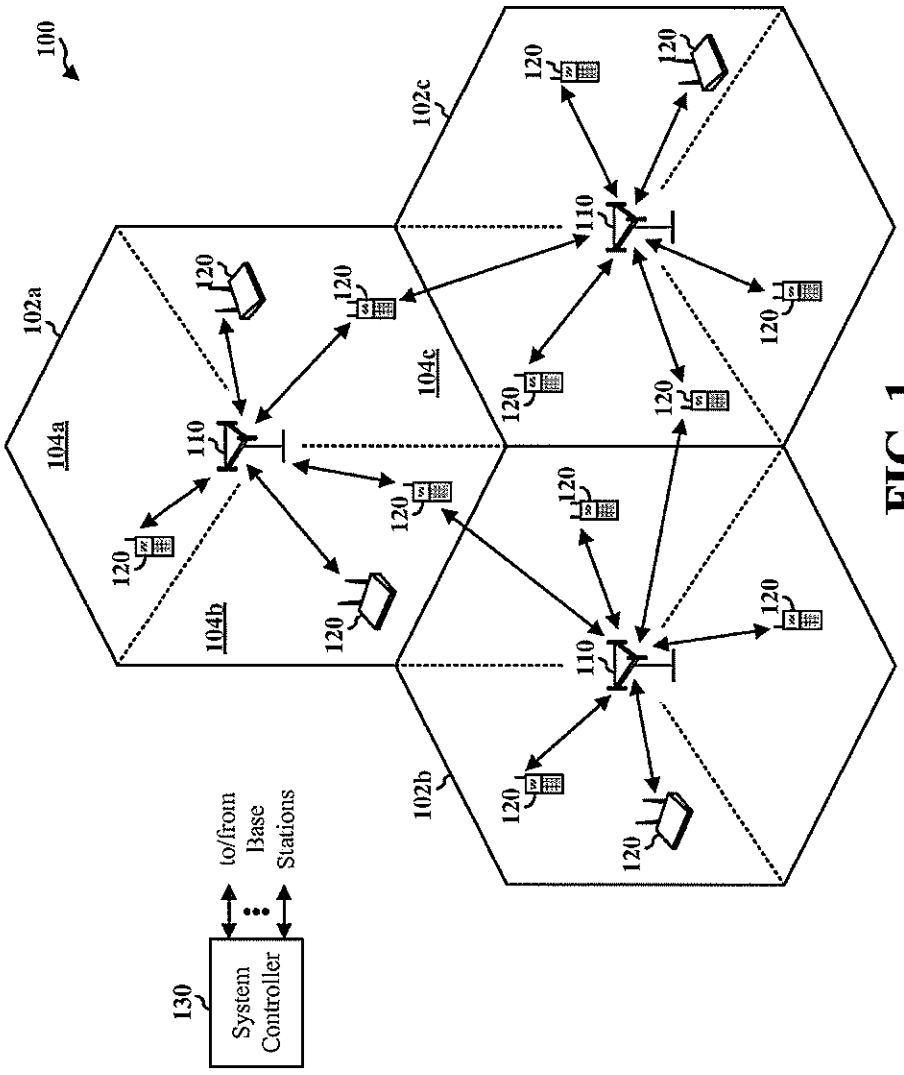
100
102a
102b
102c
104a
104b
104c
110
120
130
System Controller
to/from Base Stations

FIG. 1

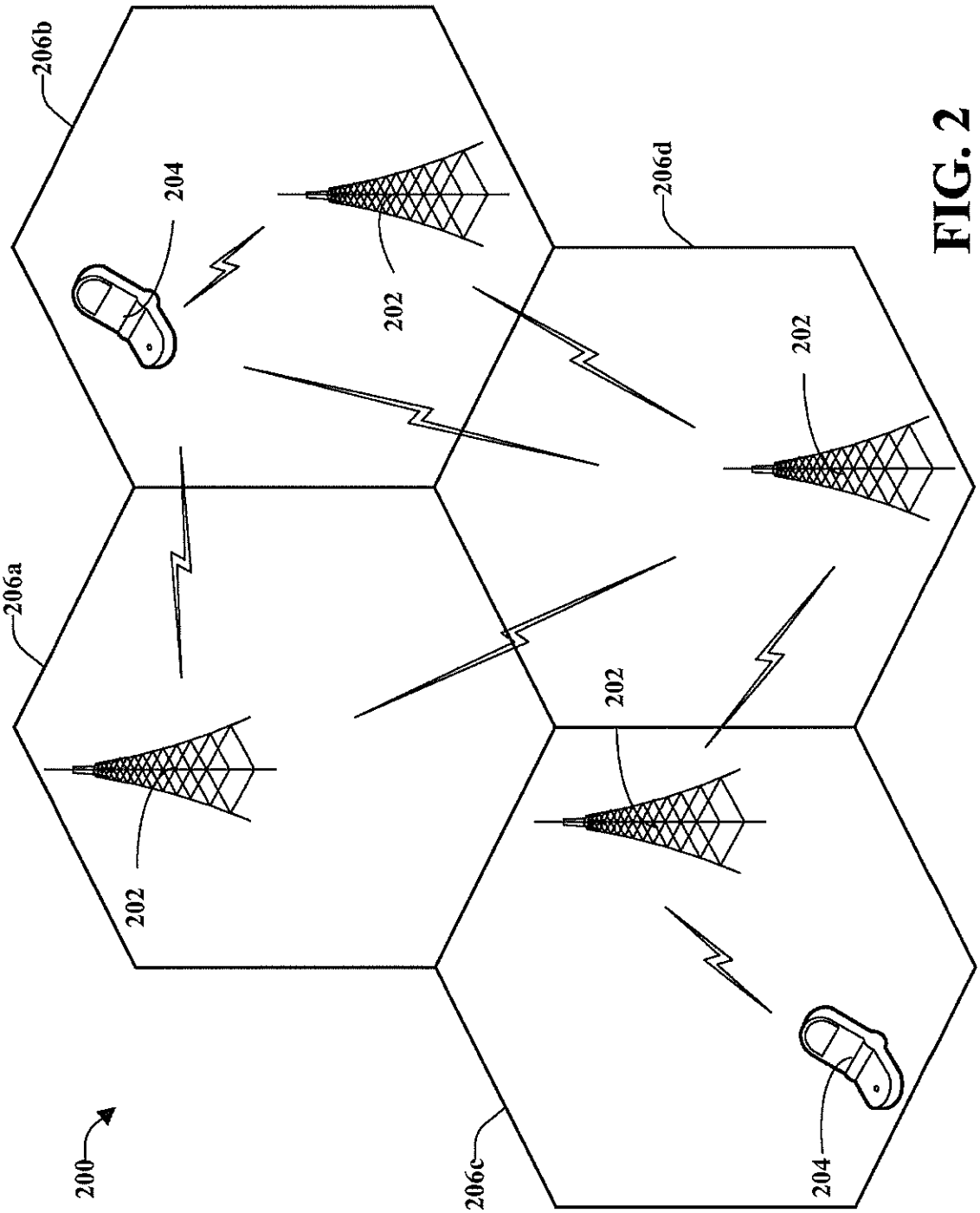

FIG. 2

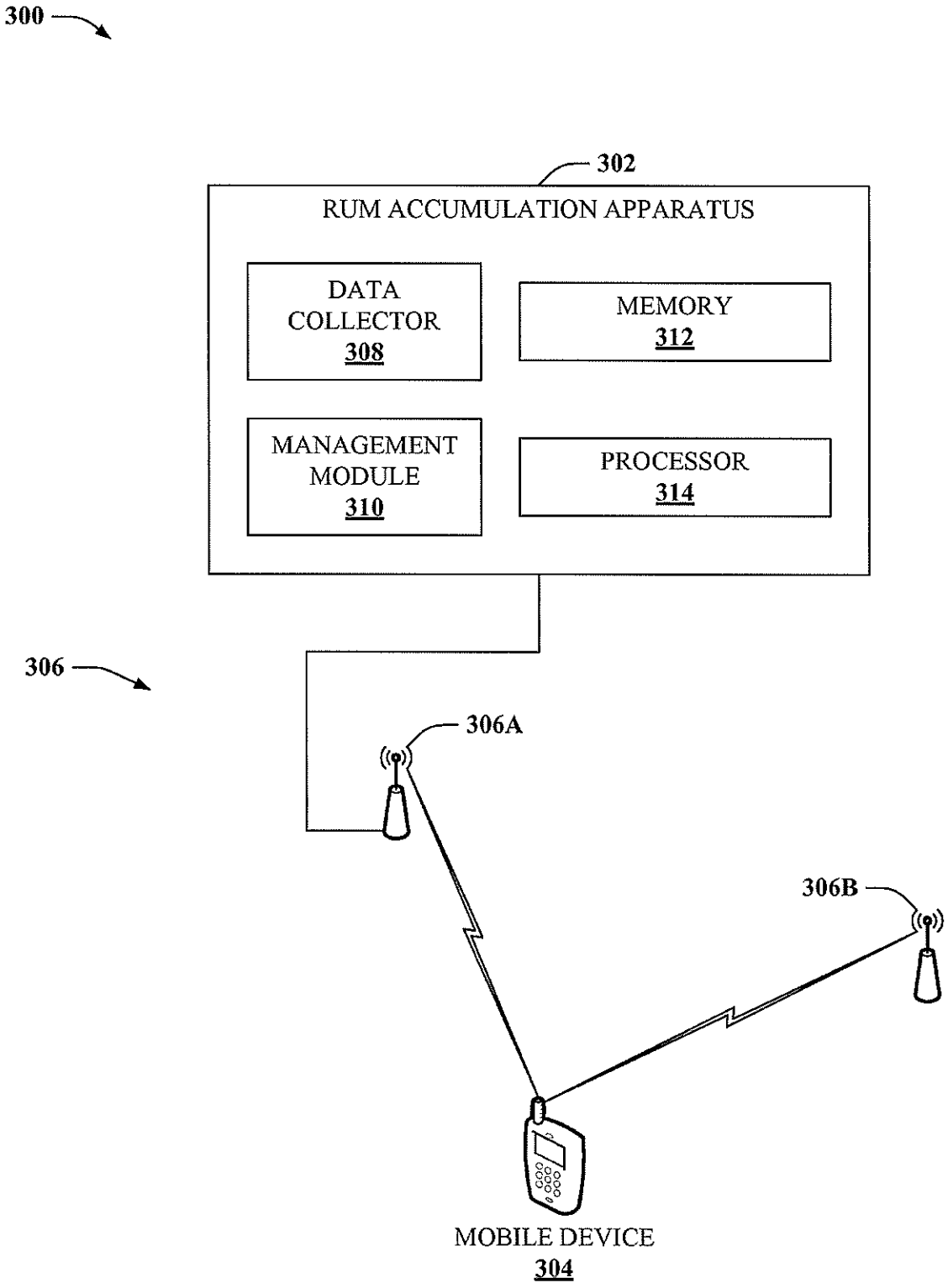
300
302
RUM ACCUMULATION APPARATUS
DATA COLLECTOR 308
MEMORY 312
MANAGEMENT MODULE 310
PROCESSOR 314
306
306A
306B
MOBILE DEVICE 304

FIG. 3

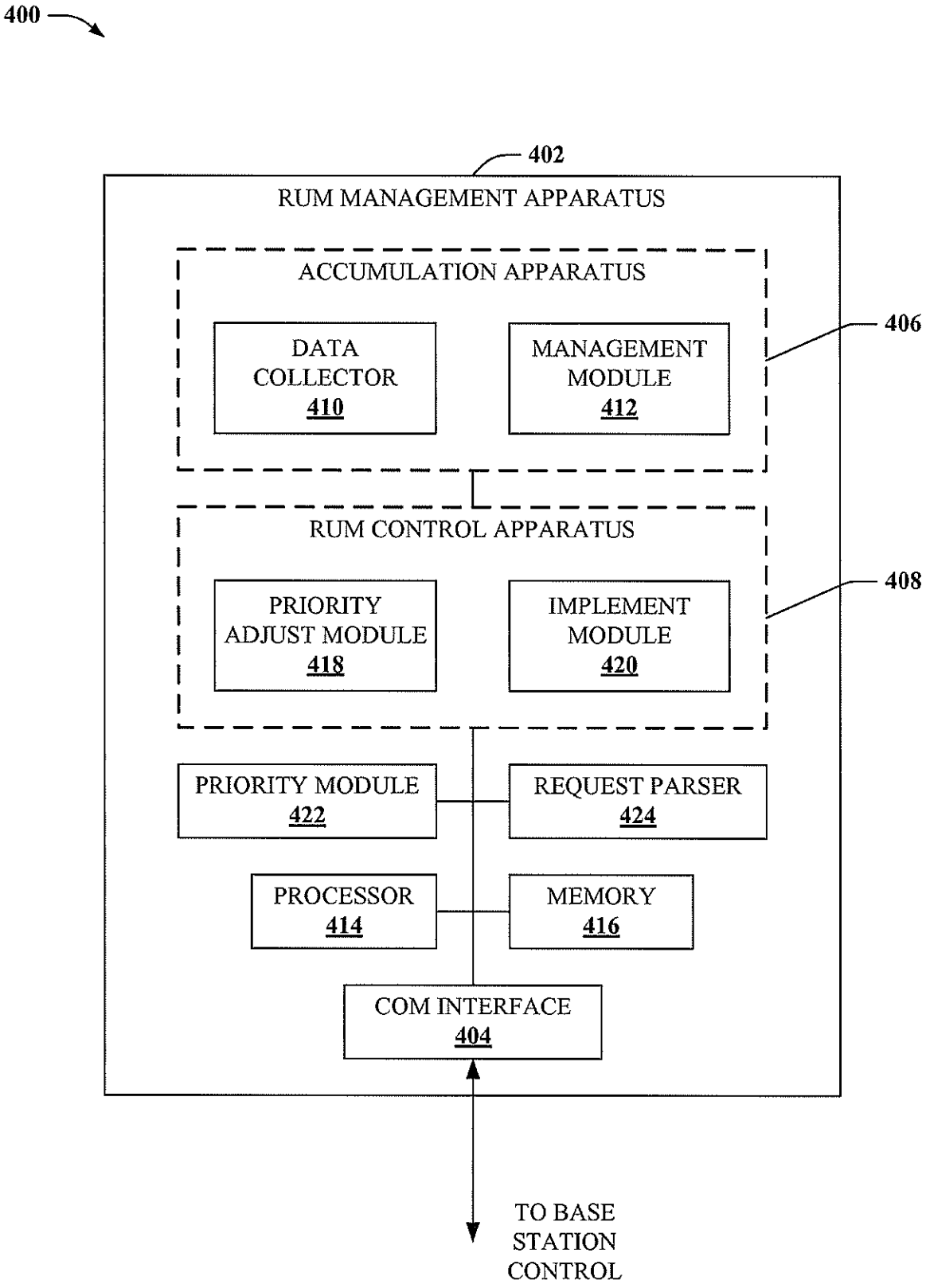
400
402
RUM MANAGEMENT APPARATUS
ACCUMULATION APPARATUS
DATA COLLECTOR 410
MANAGEMENT MODULE 412
406
RUM CONTROL APPARATUS
PRIORITY ADJUST MODULE 418
IMPLEMENT MODULE 420
408
PRIORITY MODULE 422
REQUEST PARSER 424
PROCESSOR 414
MEMORY 416
COM INTERFACE 404
TO BASE STATION CONTROL

FIG. 4

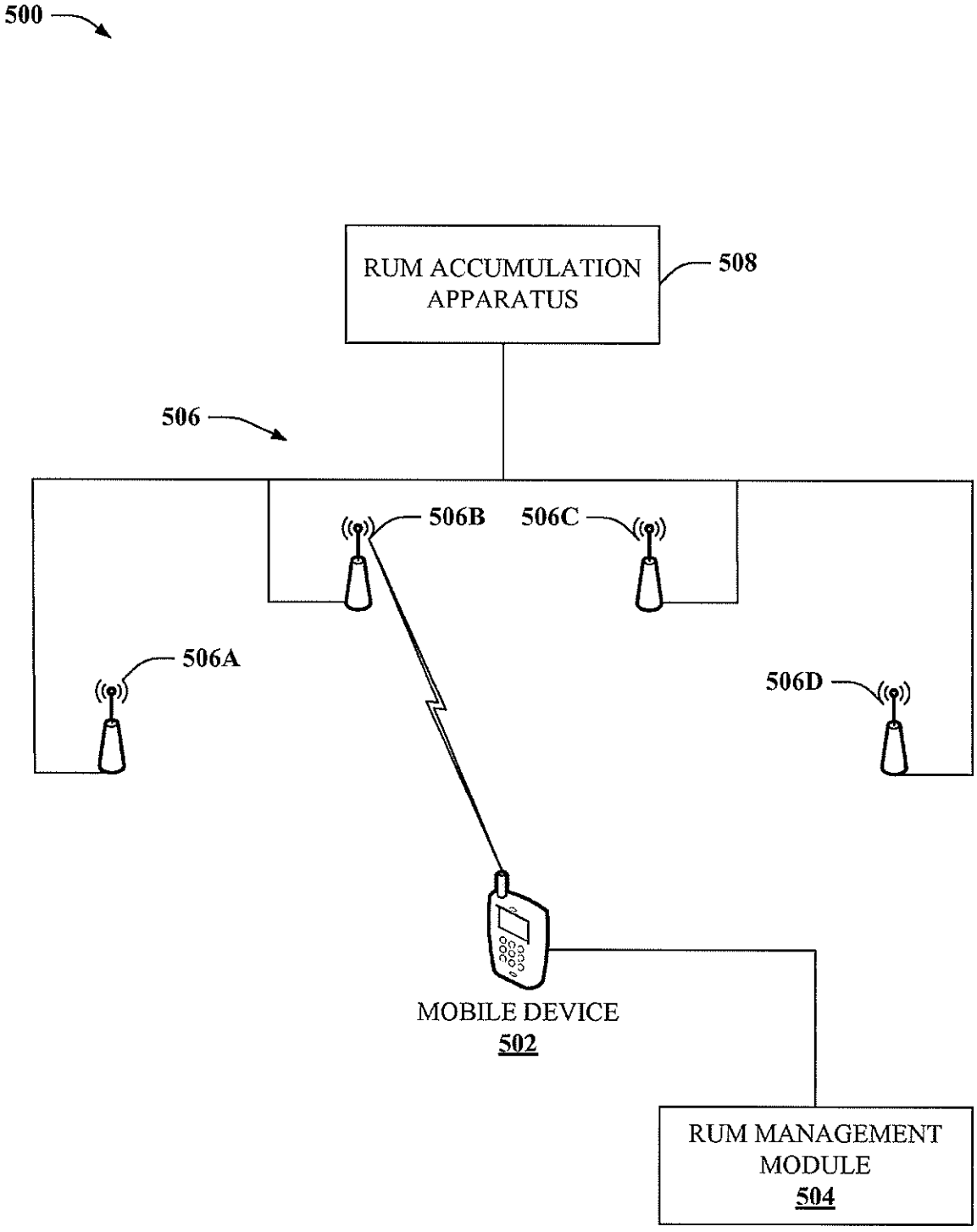
500
RUM ACCUMULATION APPARATUS
508
506
506B
506C
506A
506D
MOBILE DEVICE
502
RUM MANAGEMENT MODULE
504

FIG. 5

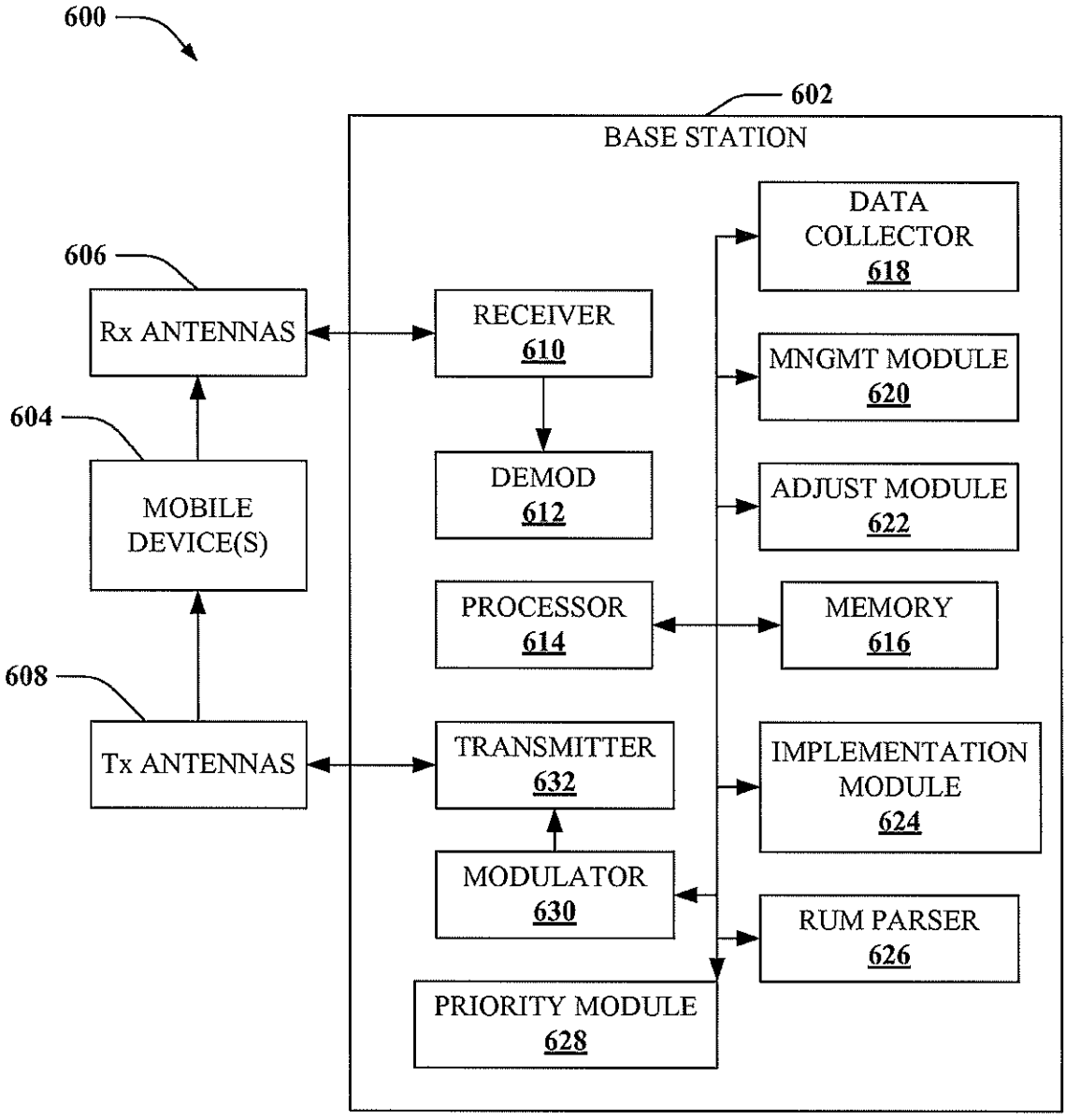
600
602
BASE STATION
606
Rx ANTENNAS
604
MOBILE DEVICE(S)
608
Tx ANTENNAS
RECEIVER 610
DEMOD 612
PROCESSOR 614
TRANSMITTER 632
MODULATOR 630
PRIORITY MODULE 628
DATA COLLECTOR 618
MNGMT MODULE 620
ADJUST MODULE 622
MEMORY 616
IMPLEMENTATION MODULE 624
RUM PARSER 626

FIG. 6

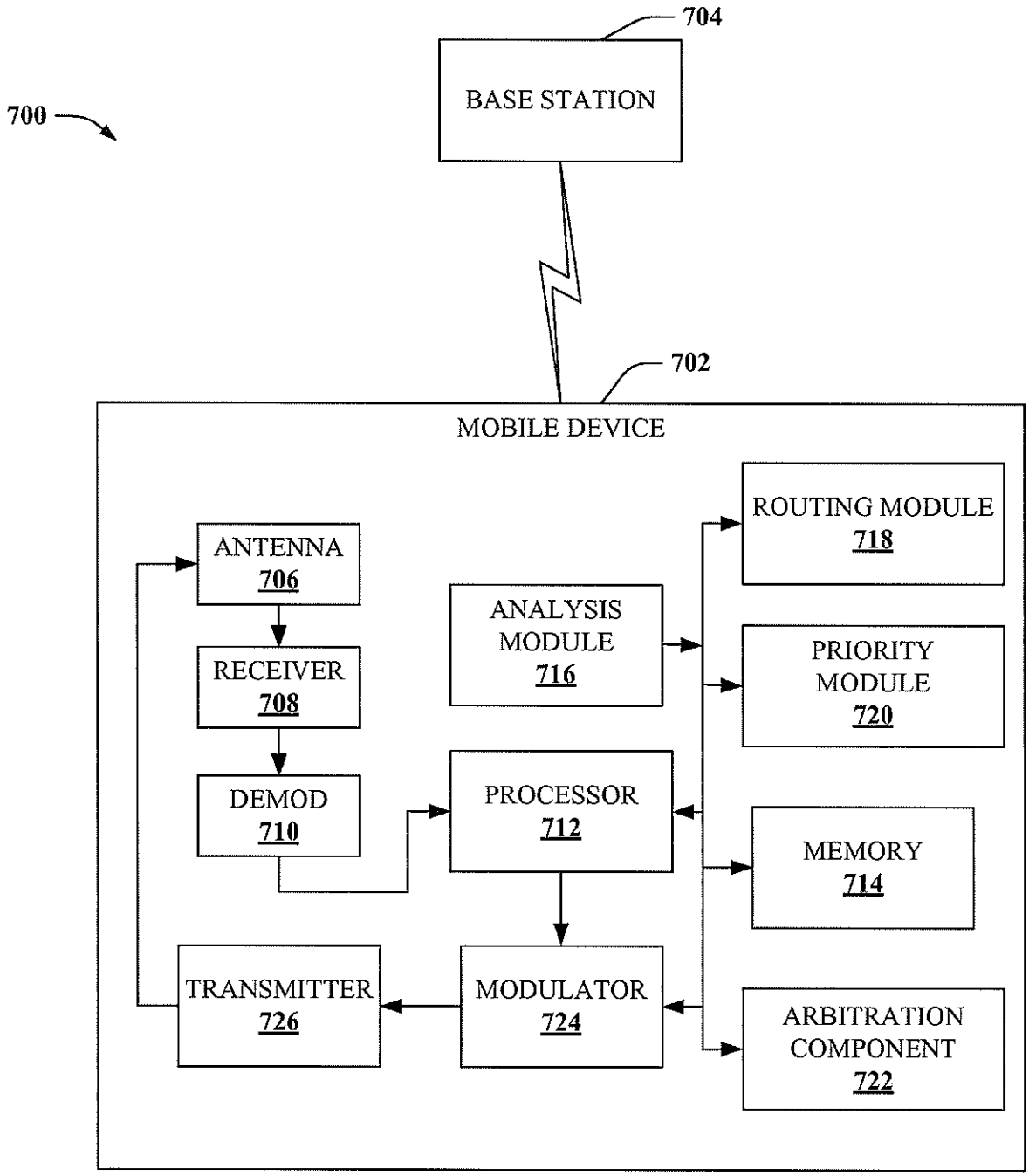
700
704
BASE STATION
702
MOBILE DEVICE
ANTENNA
706
RECEIVER
708
DEMOD
710
PROCESSOR
712
TRANSMITTER
726
MODULATOR
724
ANALYSIS
MODULE
716
ROUTING MODULE
718
PRIORITY
MODULE
720
MEMORY
714
ARBITRATION
COMPONENT
722

FIG. 7

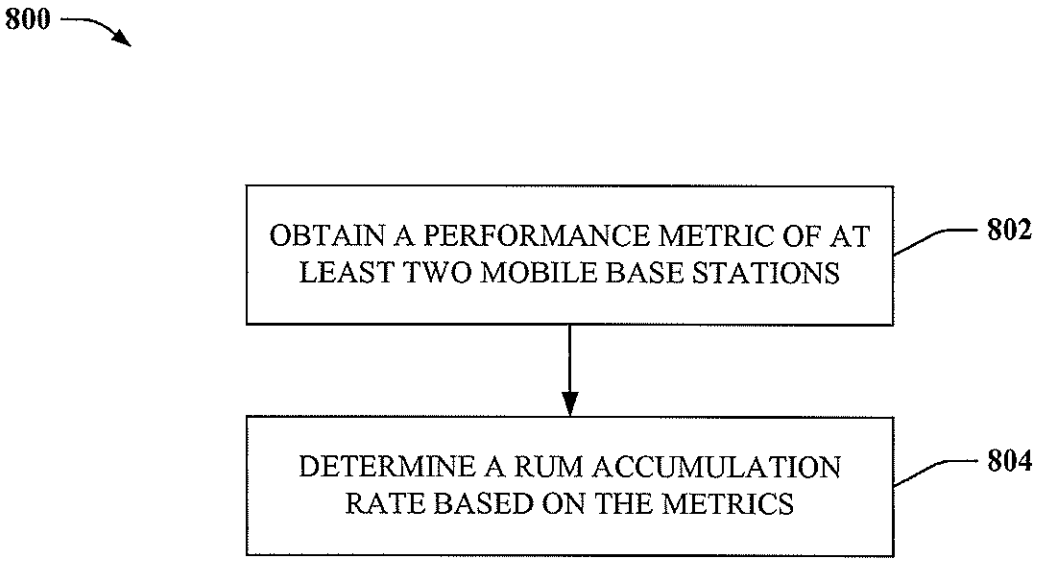
800
OBTAIN A PERFORMANCE METRIC OF AT LEAST TWO MOBILE BASE STATIONS
802
DETERMINE A RUM ACCUMULATION RATE BASED ON THE METRICS
804

FIG. 8

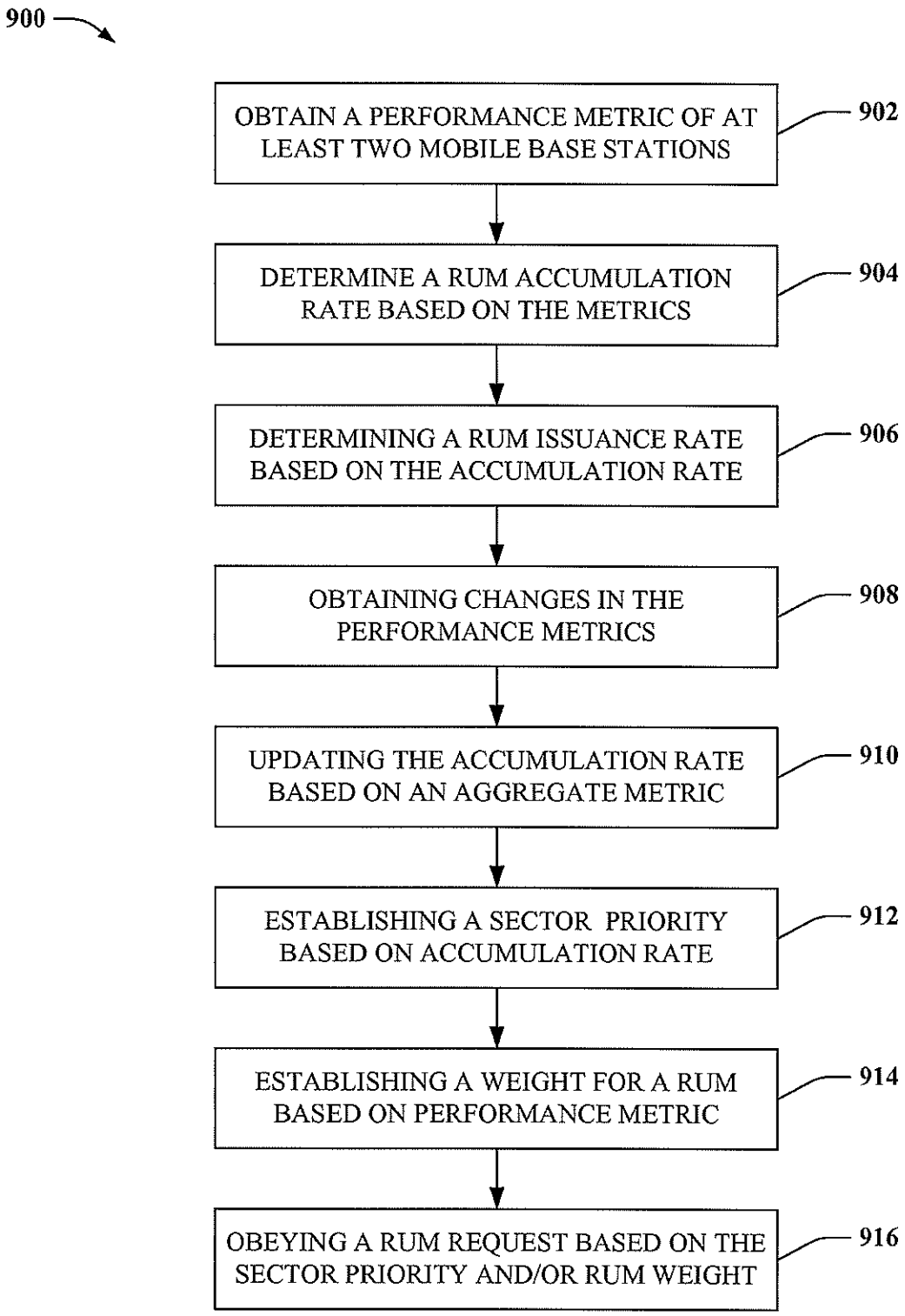
900
OBTAIN A PERFORMANCE METRIC OF AT LEAST TWO MOBILE BASE STATIONS
902
DETERMINE A RUM ACCUMULATION RATE BASED ON THE METRICS
904
DETERMINING A RUM ISSUANCE RATE BASED ON THE ACCUMULATION RATE
906
OBTAINING CHANGES IN THE PERFORMANCE METRICS
908
UPDATING THE ACCUMULATION RATE BASED ON AN AGGREGATE METRIC
910
ESTABLISHING A SECTOR PRIORITY BASED ON ACCUMULATION RATE
912
ESTABLISHING A WEIGHT FOR A RUM BASED ON PERFORMANCE METRIC
914
OBEYING A RUM REQUEST BASED ON THE SECTOR PRIORITY AND/OR RUM WEIGHT
916

FIG. 9

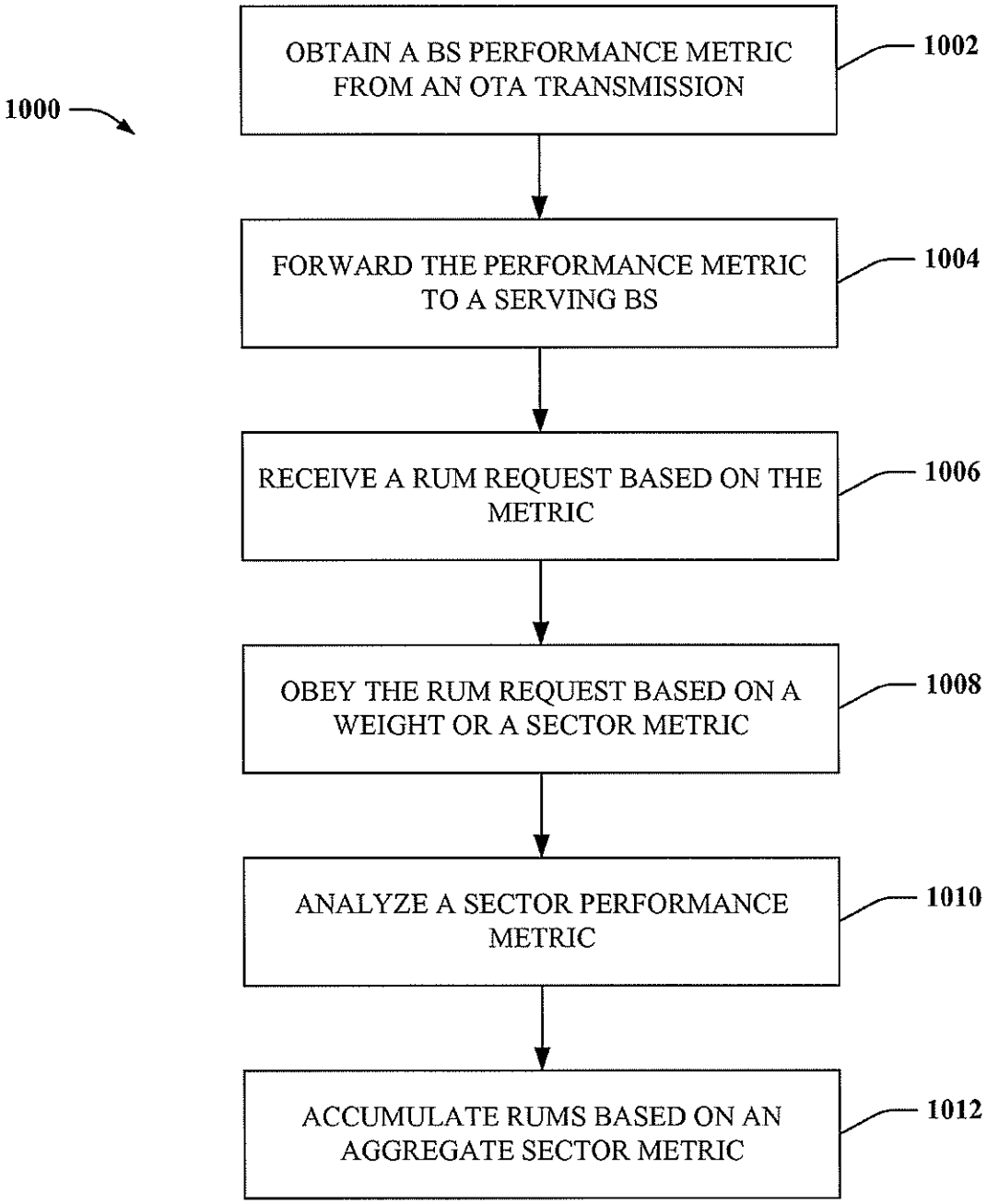
1000
OBTAIN A BS PERFORMANCE METRIC FROM AN OTA TRANSMISSION
1002
FORWARD THE PERFORMANCE METRIC TO A SERVING BS
1004
RECEIVE A RUM REQUEST BASED ON THE METRIC
1006
OBEY THE RUM REQUEST BASED ON A WEIGHT OR A SECTOR METRIC
1008
ANALYZE A SECTOR PERFORMANCE METRIC
1010
ACCUMULATE RUMS BASED ON AN AGGREGATE SECTOR METRIC
1012

FIG. 10

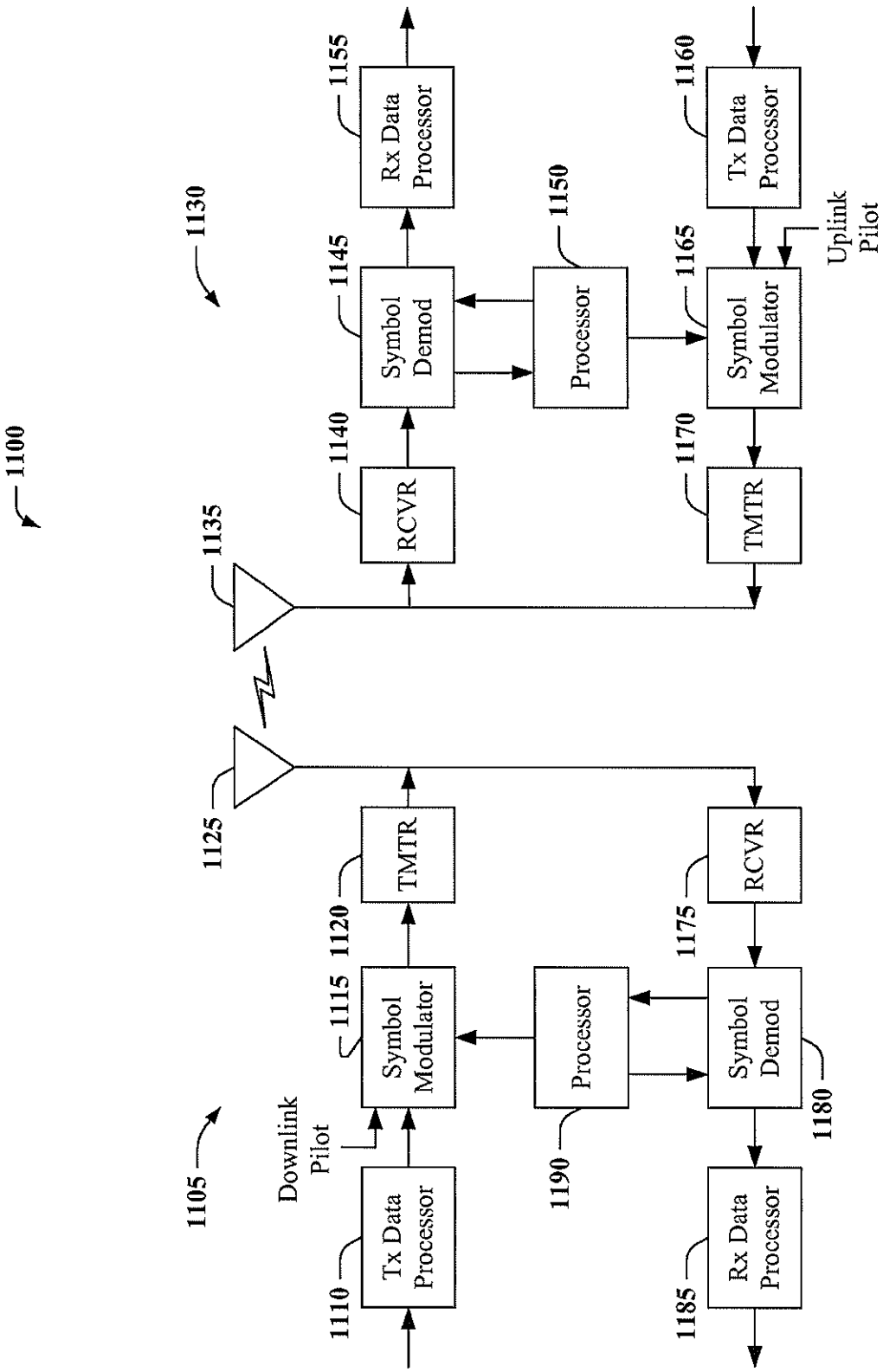
1100
1105
1110
Tx Data Processor
Downlink Pilot
1115
Symbol Modulator
1120
TMTR
1125
1130
1135
1140
RCVR
1145
Symbol Demod
1150
Processor
1155
Rx Data Processor
1160
Tx Data Processor
Uplink Pilot
1165
Symbol Modulator
1170
TMTR
1175
RCVR
1180
Symbol Demod
1185
Rx Data Processor
1190
Processor

FIG. 11

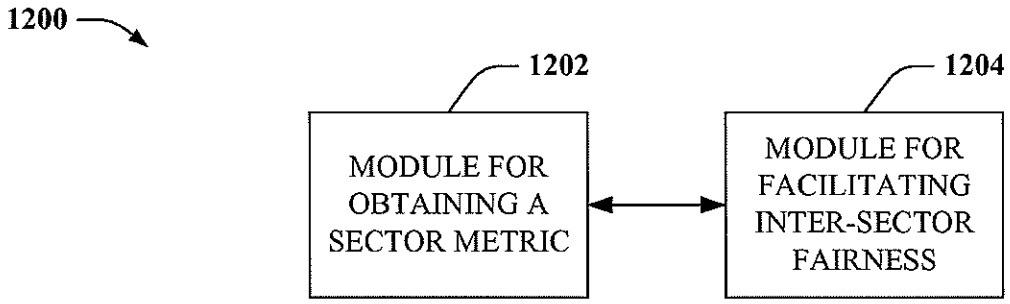
1200
1202
1204
MODULE FOR OBTAINING A SECTOR METRIC
MODULE FOR FACILITATING INTER-SECTOR FAIRNESS

FIG. 12

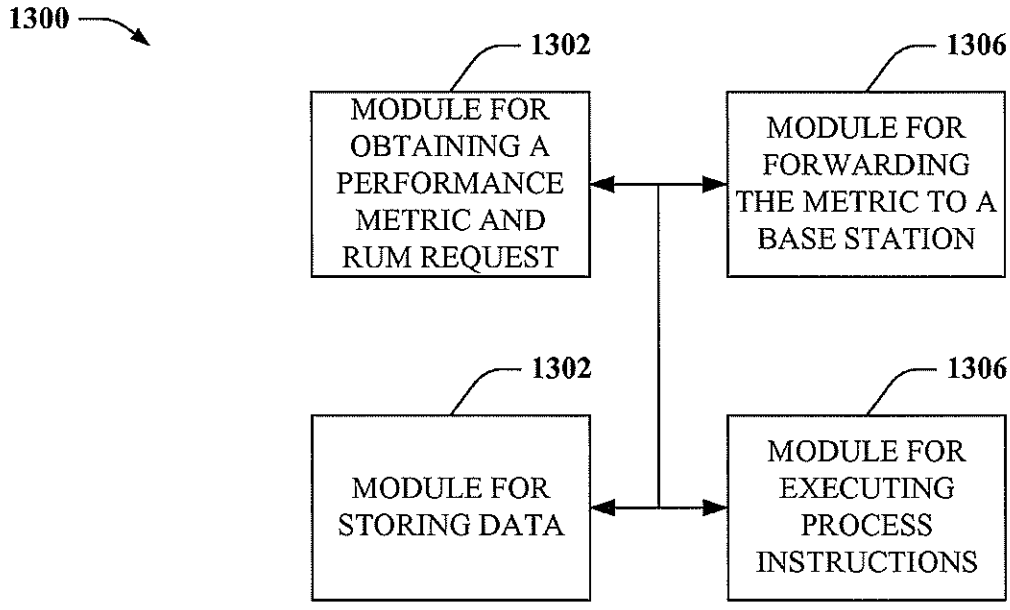
1300
1302
1306
MODULE FOR OBTAINING A PERFORMANCE METRIC AND RUM REQUEST
MODULE FOR FORWARDING THE METRIC TO A BASE STATION
1302
1306
MODULE FOR STORING DATA
MODULE FOR EXECUTING PROCESS INSTRUCTIONS

FIG. 13