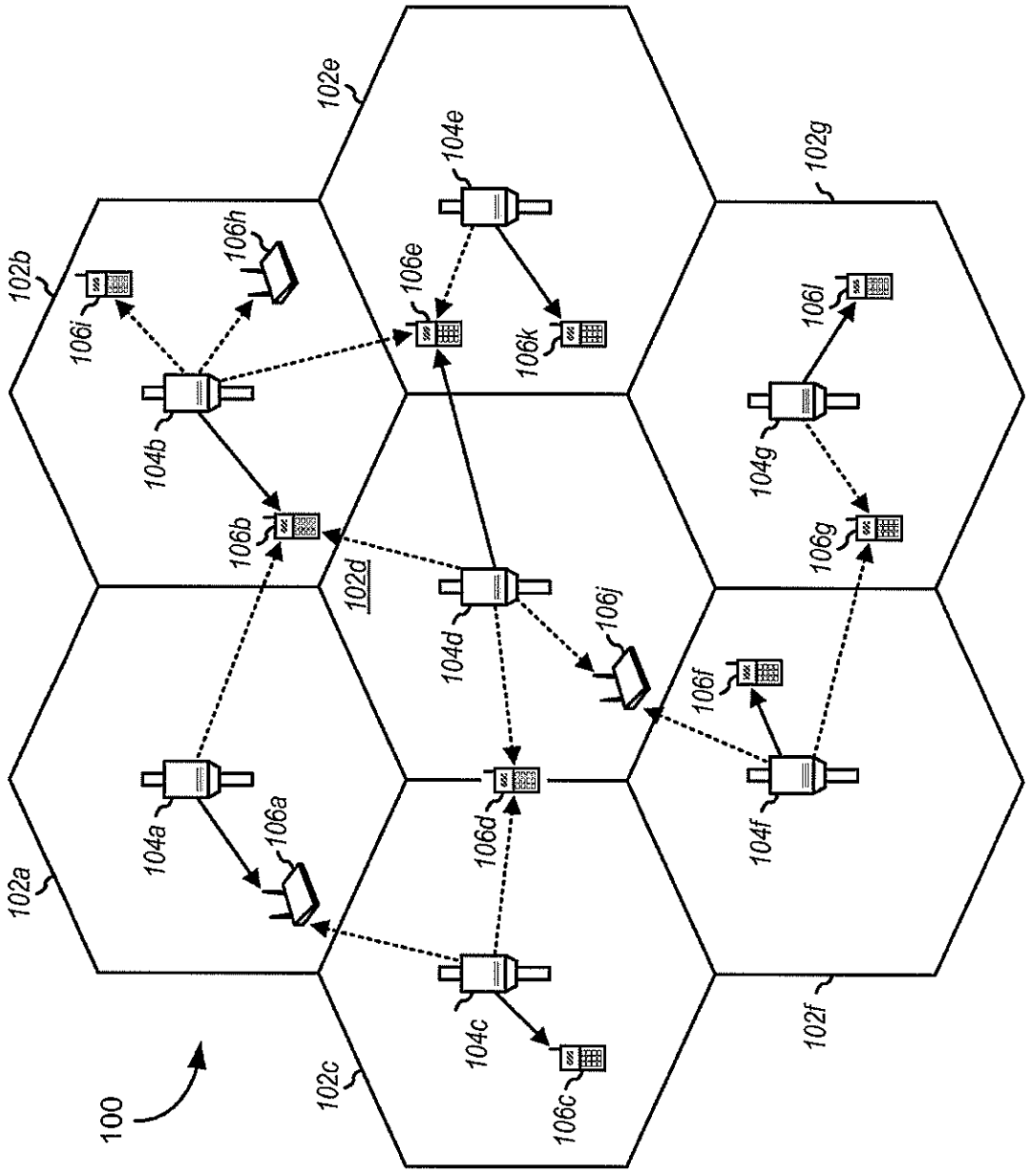

100
102a
102b
102c
102d
102e
102f
102g
104a
104b
104c
104d
104e
104f
104g
106a
106b
106c
106d
106e
106f
106g
106h
106i
106j
106k
106l

FIG. 1

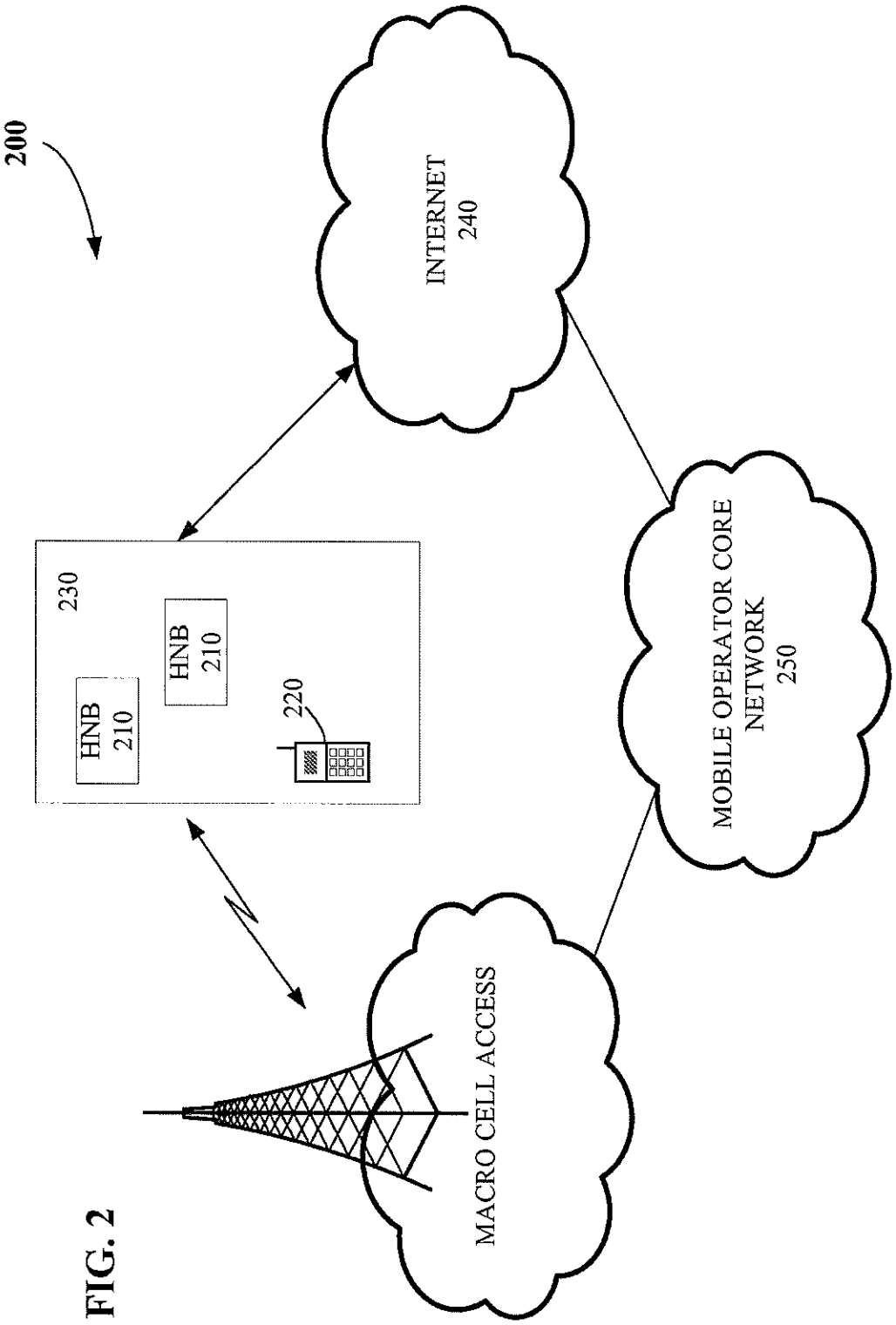

200
INTERNET
240
230
HNB
210
HNB
210
220
MOBILE OPERATOR CORE
NETWORK
250
MACRO CELL ACCESS

FIG. 2

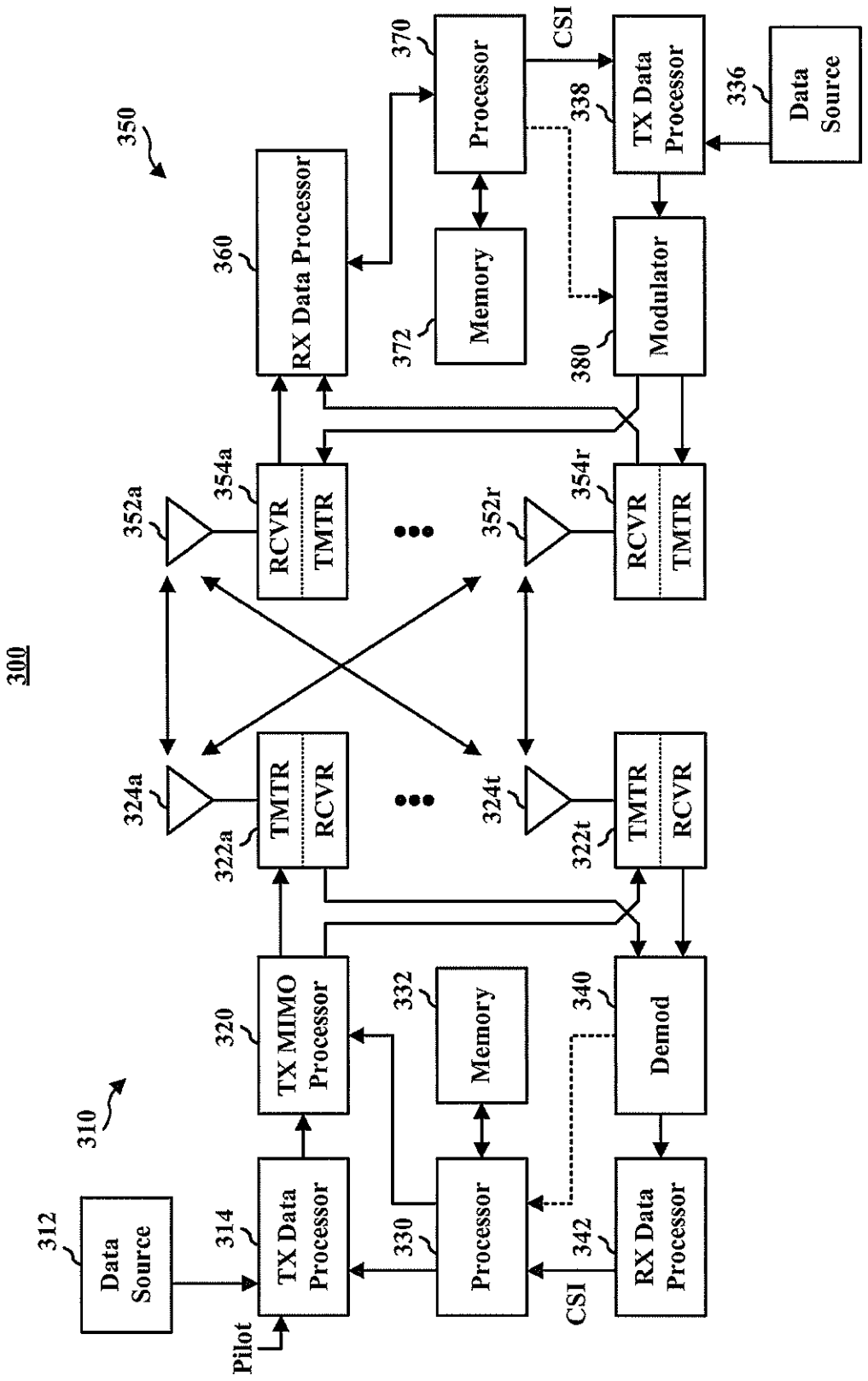

300
310
312
Data Source
314
TX Data Processor
Pilot
320
TX MIMO Processor
322a
TMTR
RCVR
324a
352a
354a
RCVR
TMTR
360
RX Data Processor
370
Processor
372
Memory
350
CSI
338
TX Data Processor
336
Data Source
380
Modulator
354r
RCVR
TMTR
352r
324t
322t
TMTR
RCVR
340
Demod
332
Memory
330
Processor
342
RX Data Processor
CSI

FIG. 3

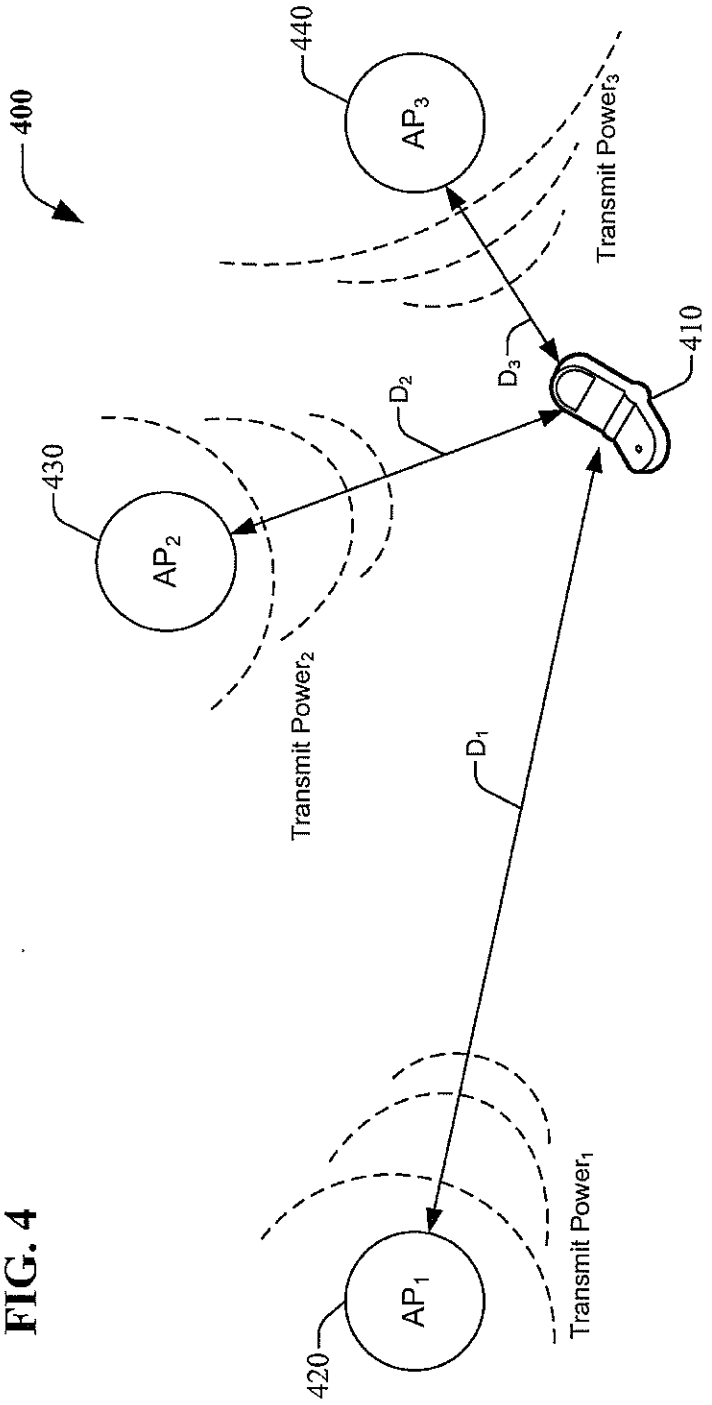

400
440
AP3
Transmit Power3
D3
410
D2
430
AP2
Transmit Power2
D1
AP1
420
Transmit Power1

FIG. 4

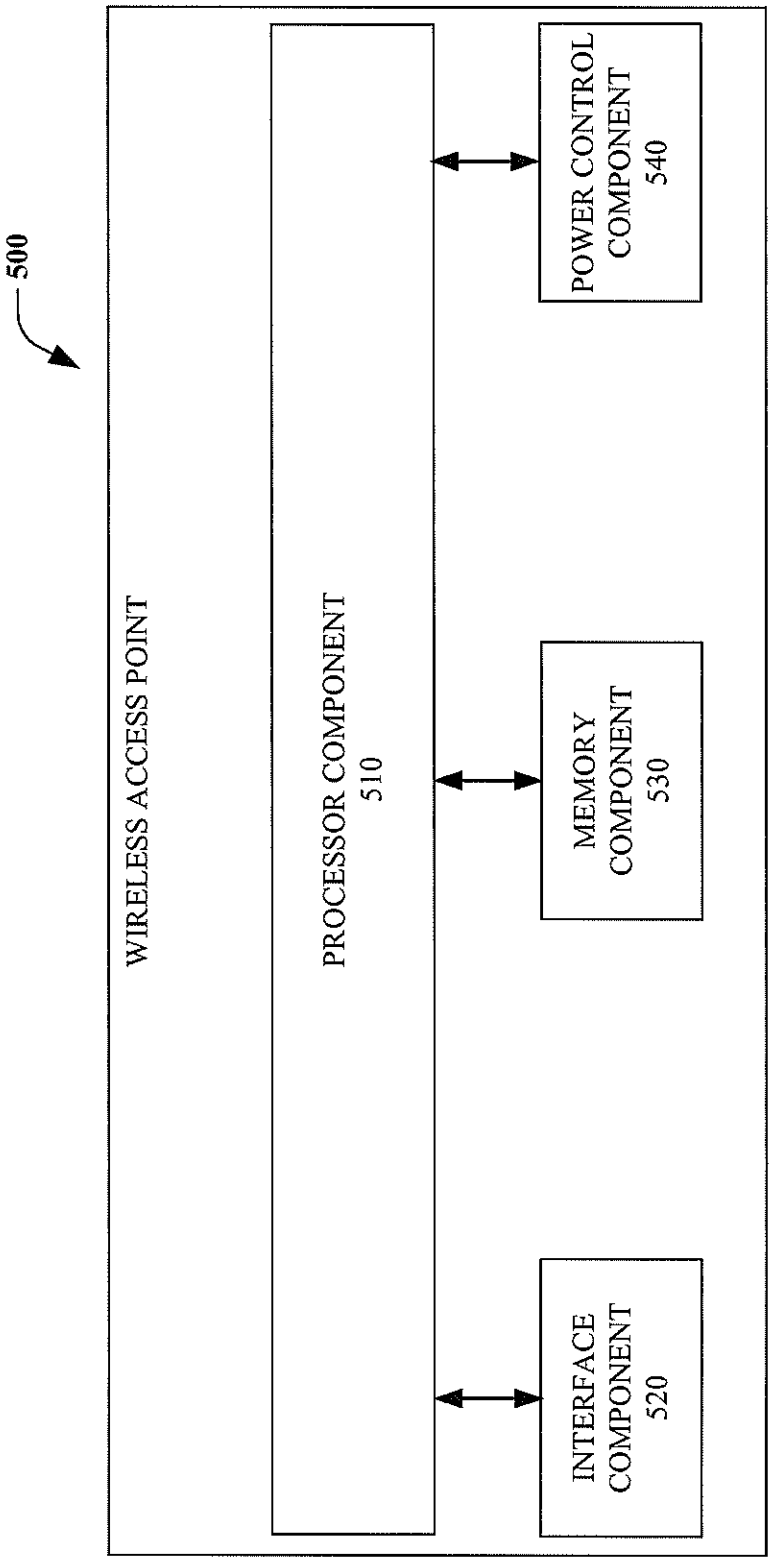

500
WIRELESS ACCESS POINT
PROCESSOR COMPONENT
510
POWER CONTROL
COMPONENT
540
MEMORY
COMPONENT
530
INTERFACE
COMPONENT
520

FIG. 5

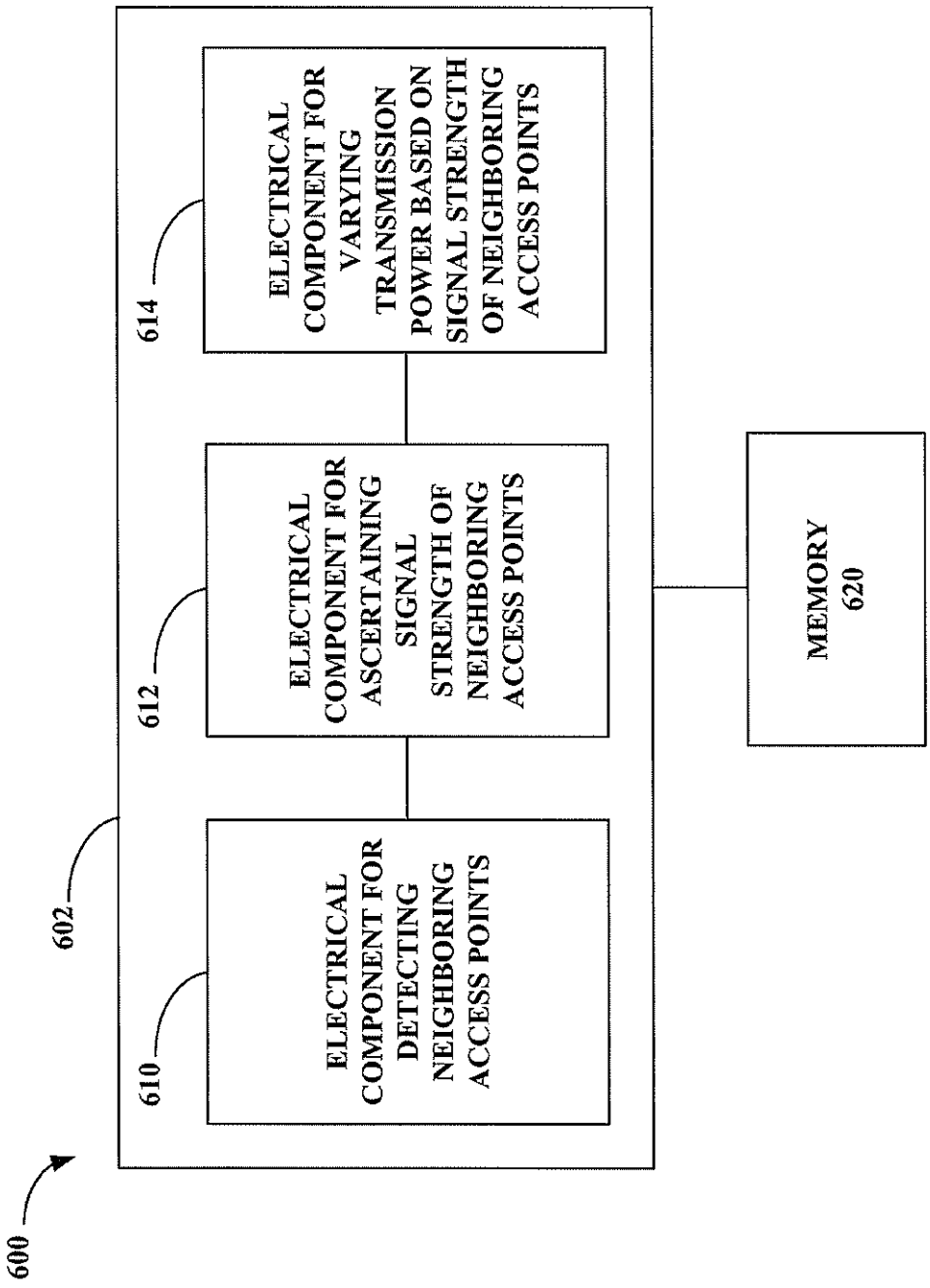

600
602
610
ELECTRICAL COMPONENT FOR DETECTING NEIGHBORING ACCESS POINTS
612
ELECTRICAL COMPONENT FOR ASCERTAINING SIGNAL STRENGTH OF NEIGHBORING ACCESS POINTS
614
ELECTRICAL COMPONENT FOR VARYING TRANSMISSION POWER BASED ON SIGNAL STRENGTH OF NEIGHBORING ACCESS POINTS
MEMORY 620

FIG. 6

FIG. 7

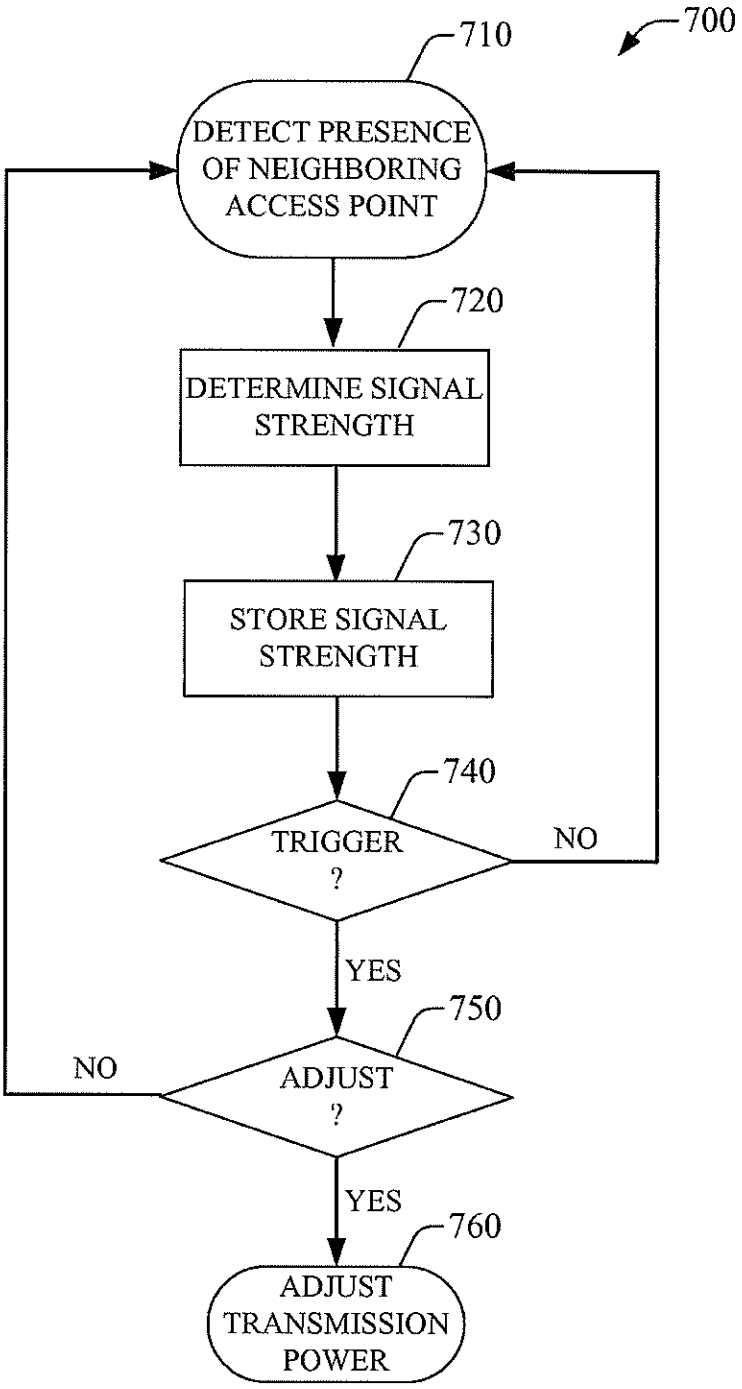
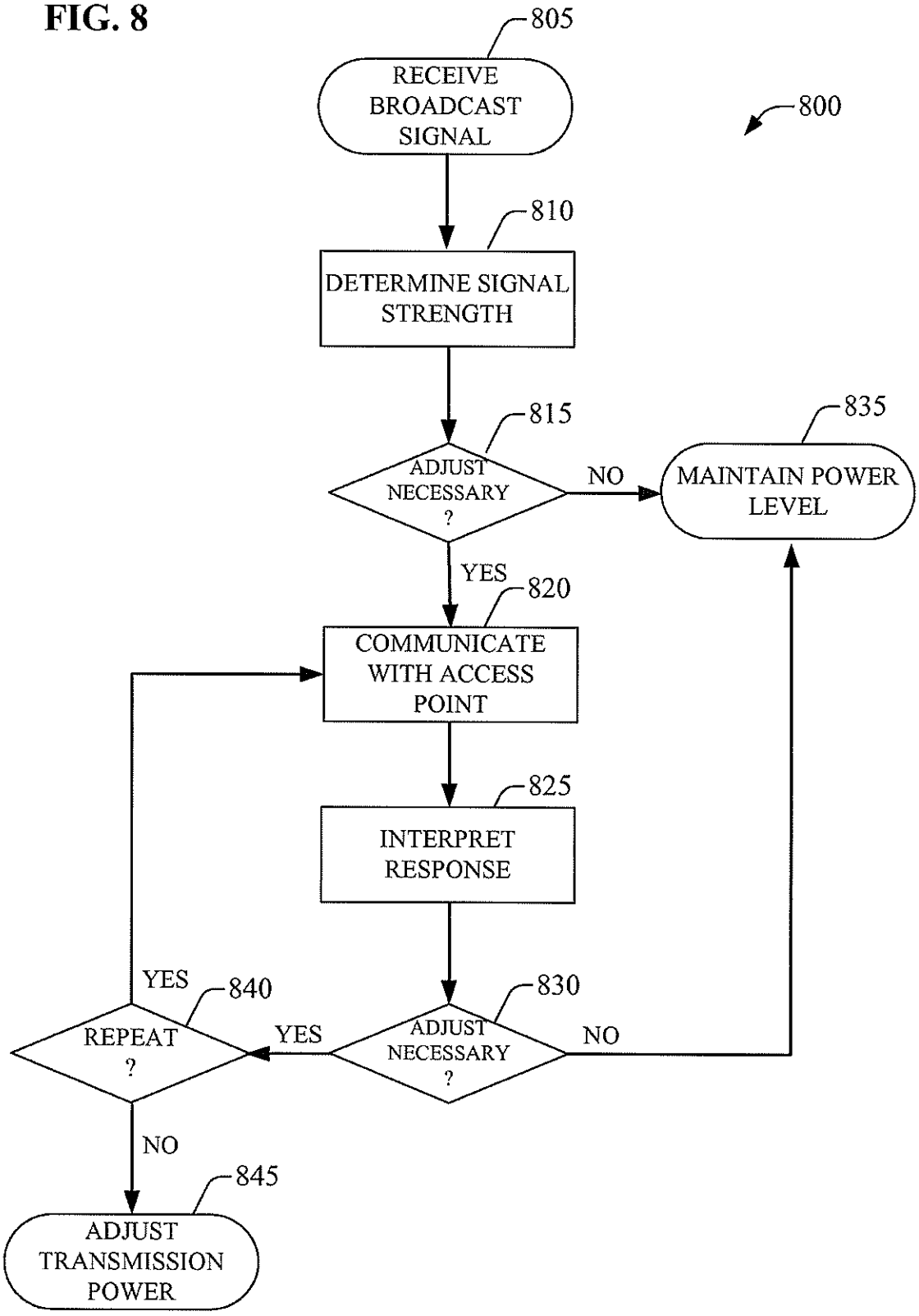

700
710
DETECT PRESENCE OF NEIGHBORING ACCESS POINT
720
DETERMINE SIGNAL STRENGTH
730
STORE SIGNAL STRENGTH
740
TRIGGER ?
NO
YES
750
ADJUST ?
NO
YES
760
ADJUST TRANSMISSION POWER

FIG. 8


805
RECEIVE BROADCAST SIGNAL
800
810
DETERMINE SIGNAL STRENGTH
815
ADJUST NECESSARY ?
NO
835
MAINTAIN POWER LEVEL
YES
820
COMMUNICATE WITH ACCESS POINT
825
INTERPRET RESPONSE
YES
840
REPEAT ?
YES
830
ADJUST NECESSARY ?
NO
NO
845
ADJUST TRANSMISSION POWER

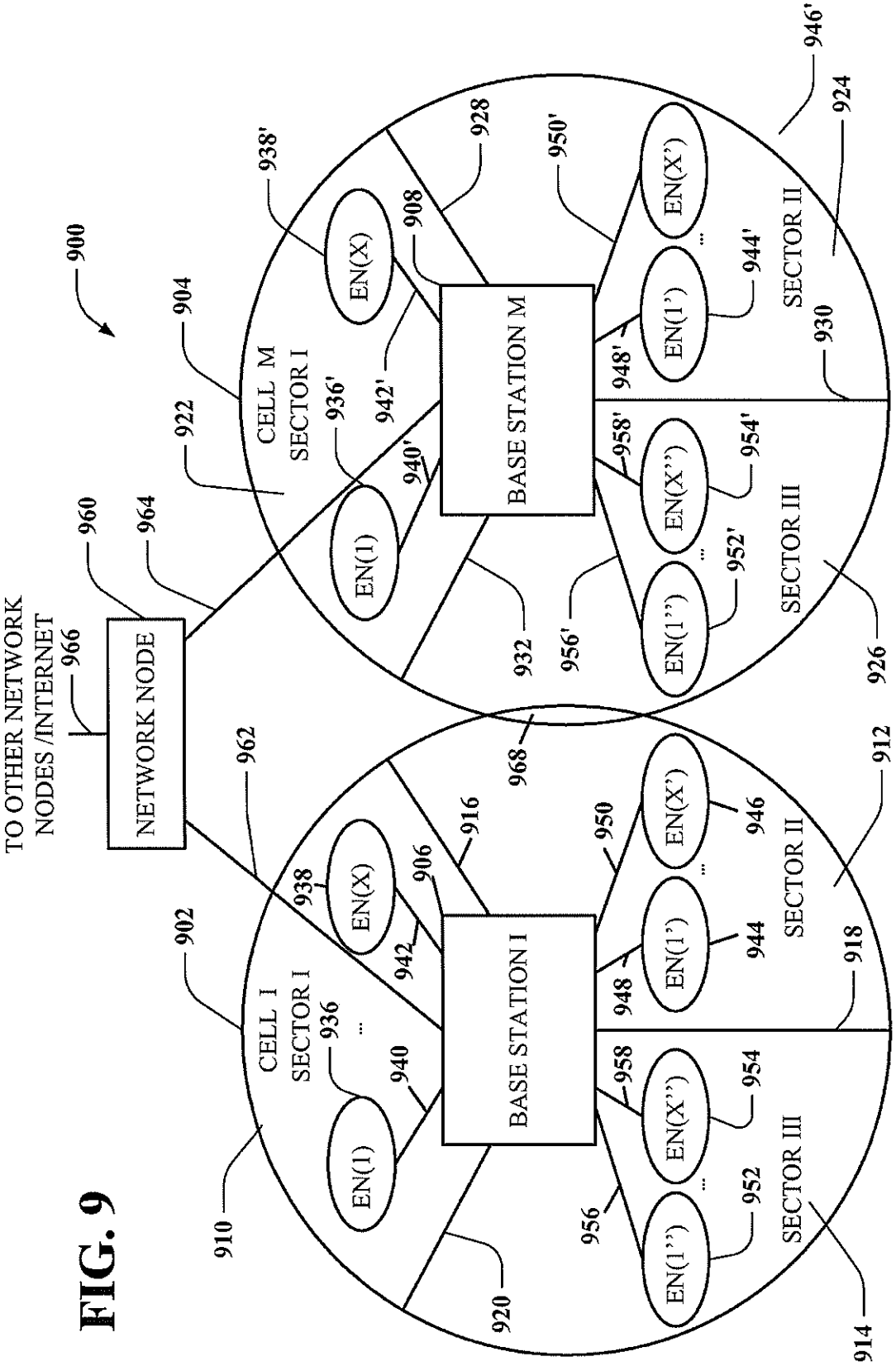

900
TO OTHER NETWORK NODES /INTERNET
966
NETWORK NODE
960
964
962
902
904
922
CELL I
SECTOR I
CELL M
SECTOR I
BASE STATION I
BASE STATION M
EN(1)
EN(X)
EN(1')
EN(X')
EN(1'')
EN(X'')
936
938
940
942
944
946
948
950
952
954
956
958
906
916
918
920
924
926
928
930
932
936'
938'
940'
942'
944'
946'
948'
950'
952'
954'
956'
958'
908
910
912
914
968
SECTOR II
SECTOR III

FIG. 9

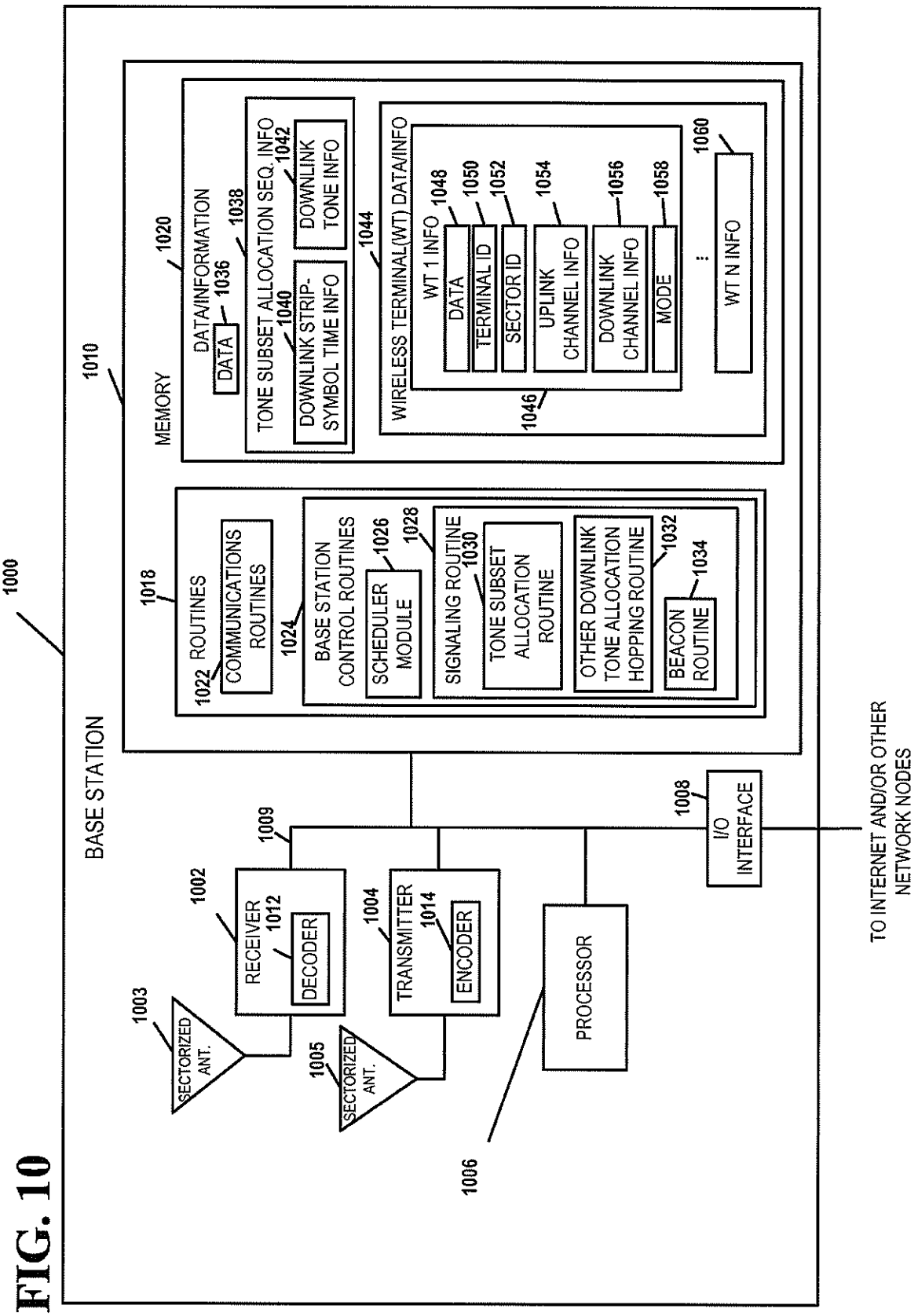

1000
BASE STATION
1010
MEMORY
1020
DATA/INFORMATION
DATA
1036
TONE SUBSET ALLOCATION SEQ. INFO
1038
DOWNLINK STRIP-SYMBOL TIME INFO
1040
DOWNLINK TONE INFO
1042
1044
WIRELESS TERMINAL(WT) DATA/INFO
WT 1 INFO
1048
DATA
1050
TERMINAL ID
1052
SECTOR ID
1054
UPLINK CHANNEL INFO
1056
DOWNLINK CHANNEL INFO
1058
MODE
1046
WT N INFO
1060
1018
ROUTINES
1022
COMMUNICATIONS ROUTINES
1024
BASE STATION CONTROL ROUTINES
SCHEDULER MODULE
1026
SIGNALING ROUTINE
1028
TONE SUBSET ALLOCATION ROUTINE
1030
OTHER DOWNLINK TONE ALLOCATION HOPPING ROUTINE
1032
BEACON ROUTINE
1034
1009
1002
RECEIVER
1012
DECODER
1004
TRANSMITTER
1014
ENCODER
1003
SECTORIZED ANT.
1005
SECTORIZED ANT.
1006
PROCESSOR
1008
I/O INTERFACE
TO INTERNET AND/OR OTHER NETWORK NODES

FIG. 10

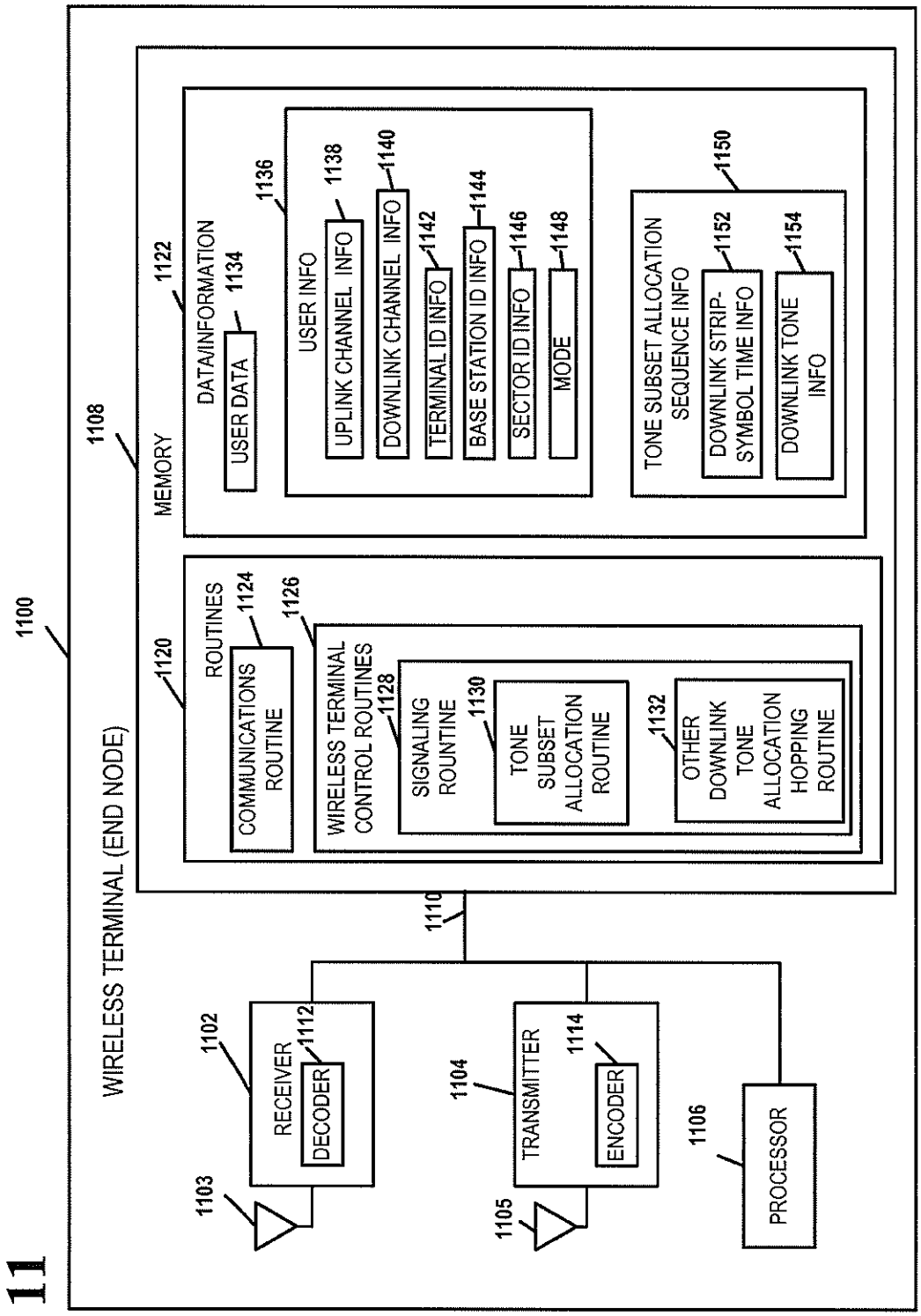

1100
WIRELESS TERMINAL (END NODE)
1108
MEMORY
1122
DATA/INFORMATION
USER DATA
1134
1136
USER INFO
UPLINK CHANNEL INFO
1138
DOWNLINK CHANNEL INFO
1140
TERMINAL ID INFO
1142
BASE STATION ID INFO
1144
SECTOR ID INFO
1146
MODE
1148
TONE SUBSET ALLOCATION SEQUENCE INFO
1150
DOWNLINK STRIP-SYMBOL TIME INFO
1152
DOWNLINK TONE INFO
1154
1120
ROUTINES
COMMUNICATIONS ROUTINE
1124
1126
WIRELESS TERMINAL CONTROL ROUTINES
1128
SIGNALING ROUNTINE
1130
TONE SUBSET ALLOCATION ROUTINE
1132
OTHER DOWNLINK TONE ALLOCATION HOPPING ROUTINE
1110
1102
RECEIVER
1112
DECODER
1103
1104
TRANSMITTER
1114
ENCODER
1105
1106
PROCESSOR

FIG. 11