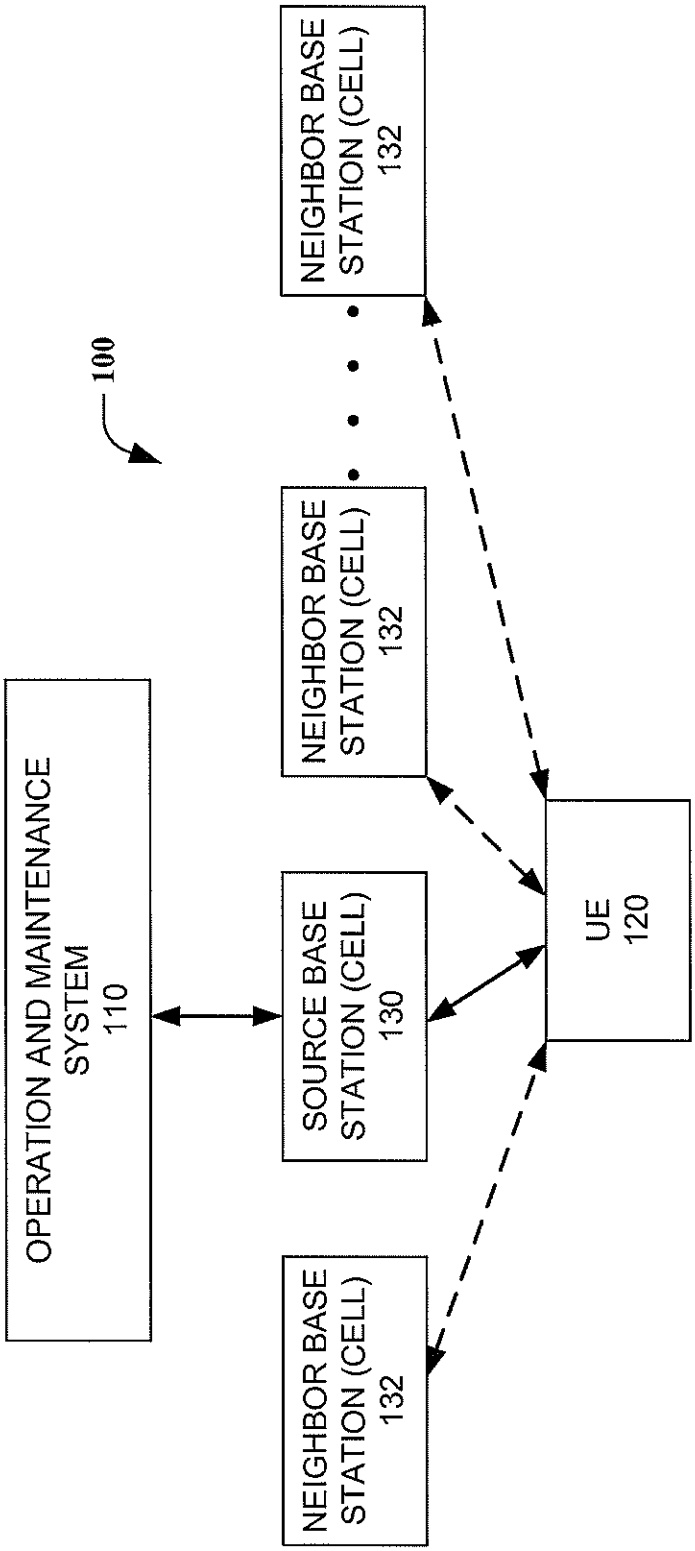

100
OPERATION AND MAINTENANCE SYSTEM 110
SOURCE BASE STATION (CELL) 130
NEIGHBOR BASE STATION (CELL) 132
NEIGHBOR BASE STATION (CELL) 132
NEIGHBOR BASE STATION (CELL) 132
UE 120

FIG. 1

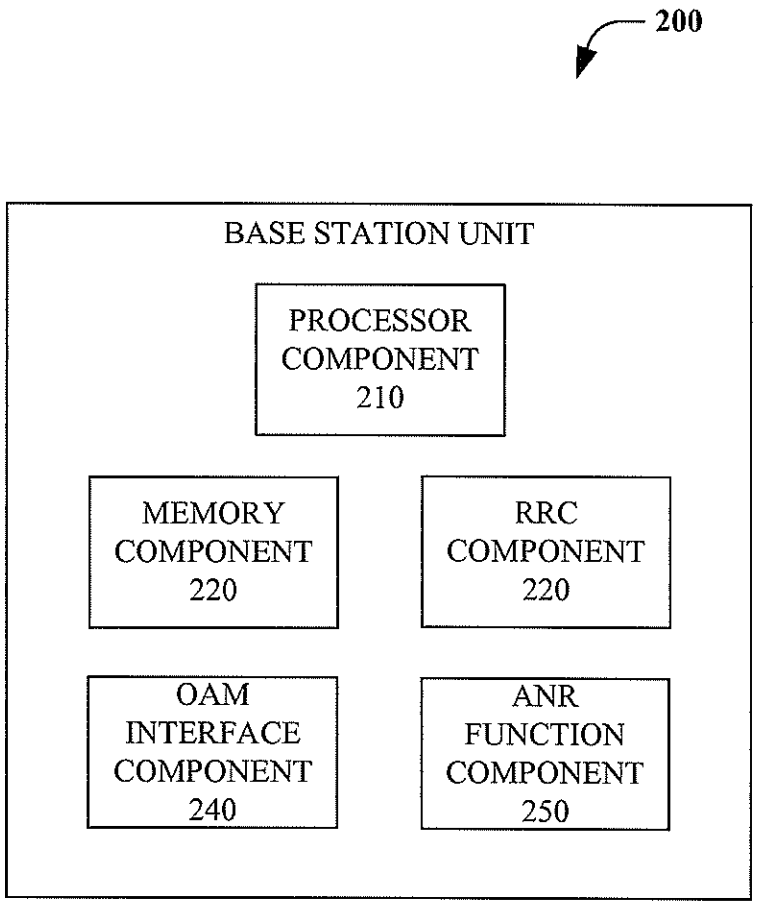

200
BASE STATION UNIT
PROCESSOR COMPONENT 210
MEMORY COMPONENT 220
RRC COMPONENT 220
OAM INTERFACE COMPONENT 240
ANR FUNCTION COMPONENT 250

FIG. 2

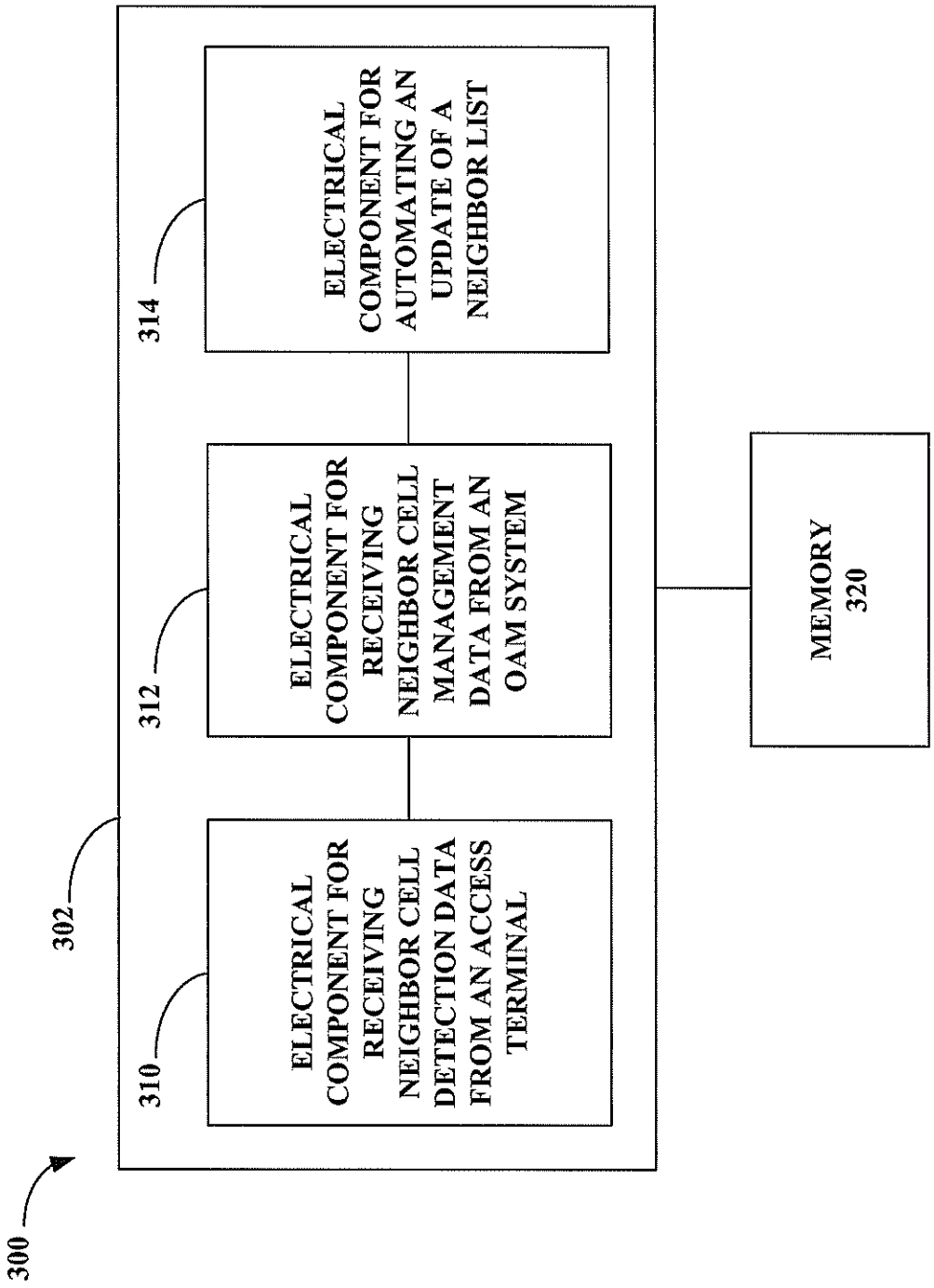

300
302
310
ELECTRICAL COMPONENT FOR RECEIVING NEIGHBOR CELL DETECTION DATA FROM AN ACCESS TERMINAL
312
ELECTRICAL COMPONENT FOR RECEIVING NEIGHBOR CELL MANAGEMENT DATA FROM AN OAM SYSTEM
314
ELECTRICAL COMPONENT FOR AUTOMATING AN UPDATE OF A NEIGHBOR LIST
MEMORY 320

FIG. 3

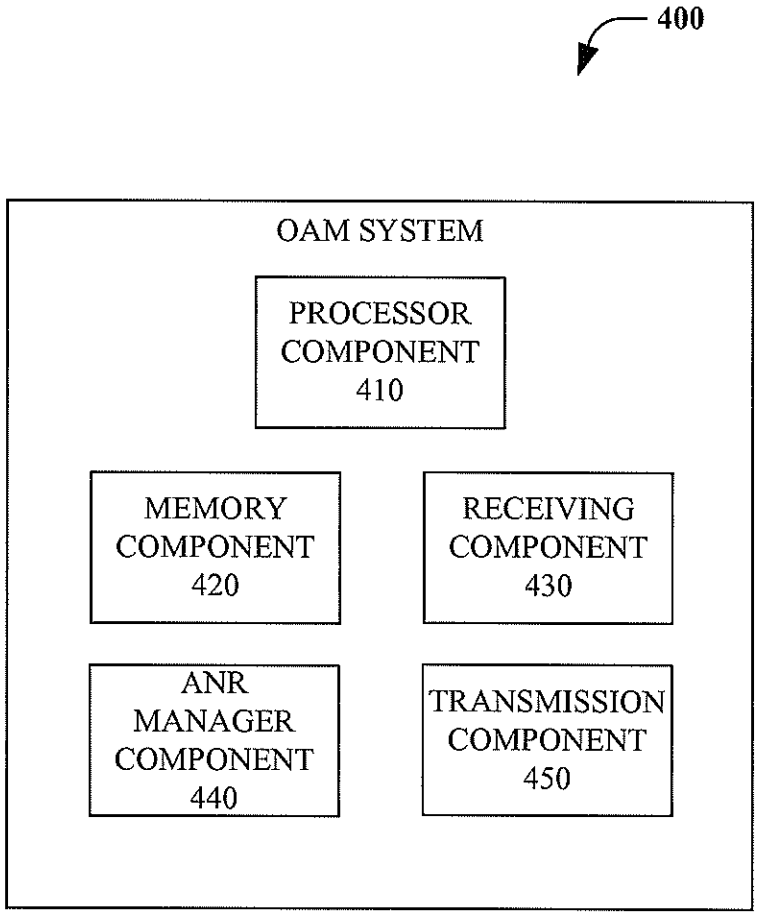

400
OAM SYSTEM
PROCESSOR COMPONENT 410
MEMORY COMPONENT 420
RECEIVING COMPONENT 430
ANR MANAGER COMPONENT 440
TRANSMISSION COMPONENT 450

FIG. 4

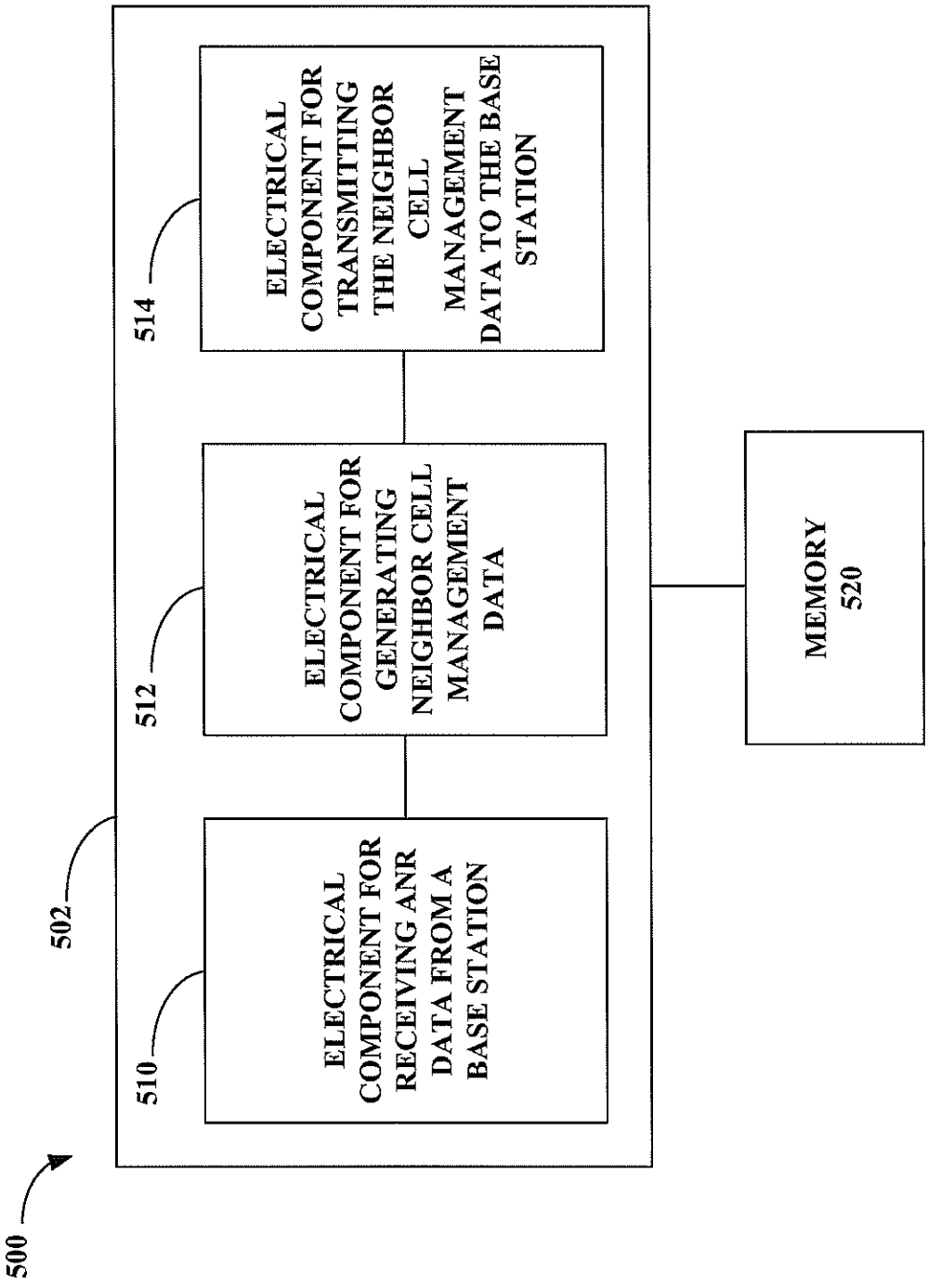

500
502
510
ELECTRICAL COMPONENT FOR RECEIVING ANR DATA FROM A BASE STATION
512
ELECTRICAL COMPONENT FOR GENERATING NEIGHBOR CELL MANAGEMENT DATA
514
ELECTRICAL COMPONENT FOR TRANSMITTING THE NEIGHBOR CELL MANAGEMENT DATA TO THE BASE STATION
MEMORY 520

FIG. 5

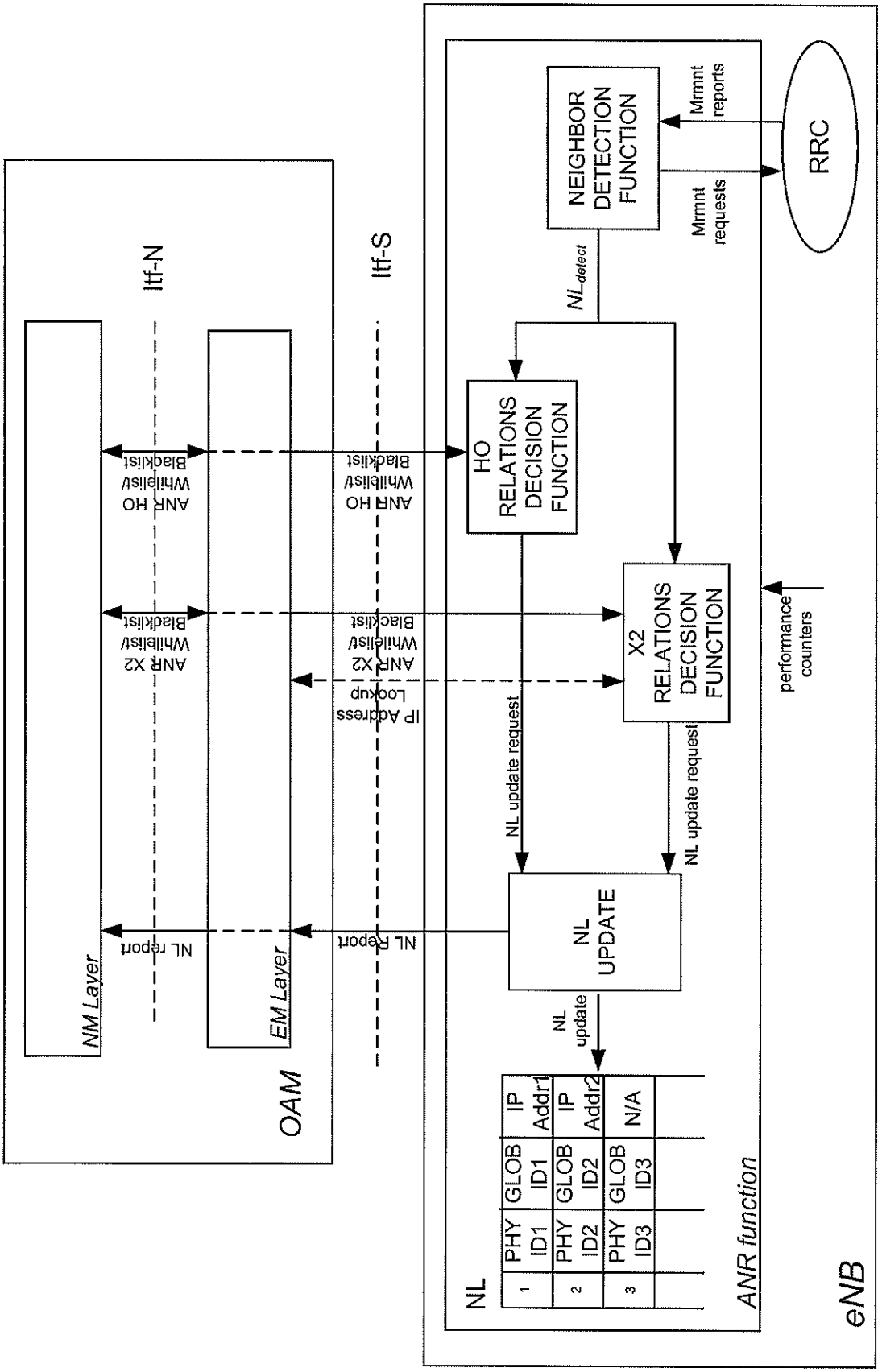

OAM
NM Layer
EM Layer
Itf-N
Itf-S
ANR HO Whitelist/ Blacklist
ANR X2 Whitelist/ Blacklist
IP Address Lookup
NL report
eNB
ANR function
NL
1 PHY ID1 GLOB ID1 IP Addr1
2 PHY ID2 GLOB ID2 IP Addr2
3 PHY ID3 GLOB ID3 N/A
NL update
NL UPDATE
NL update request
HO RELATIONS DECISION FUNCTION
X2 RELATIONS DECISION FUNCTION
NEIGHBOR DETECTION FUNCTION
NL_detect
Mrmnt requests
Mrmnt reports
RRC
performance counters

FIG. 6

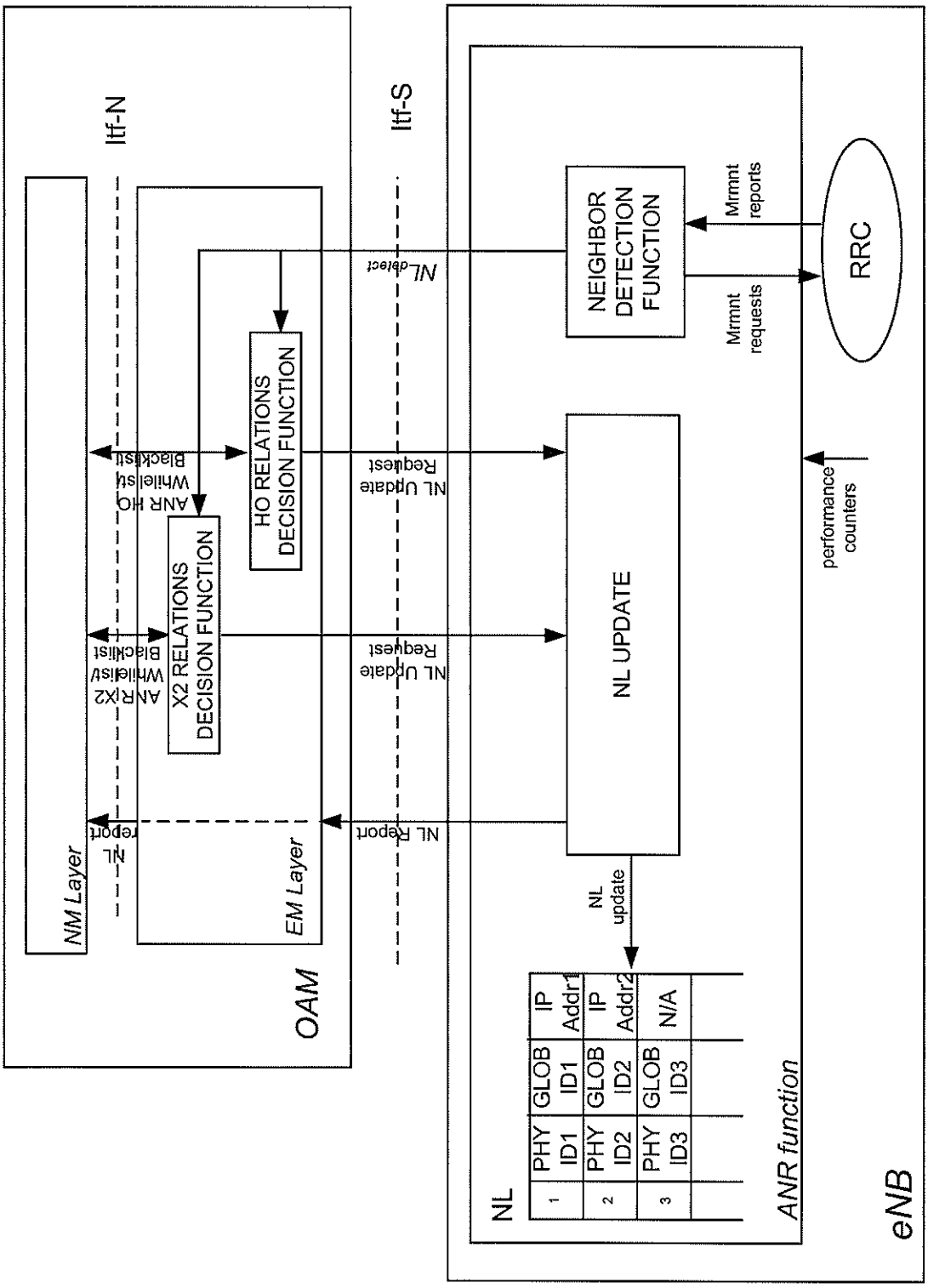

OAM
NM Layer
EM Layer
Itf-N
Itf-S
NL report
NL
HO RELATIONS DECISION FUNCTION
X2 RELATIONS DECISION FUNCTION
ANR HO Whitelist/ Blacklist
ANR X2 Whitelist/ Blacklist
NL Update Request
NL Update Request
NL report
NL delact
eNB
ANR function
NL
NL UPDATE
NEIGHBOR DETECTION FUNCTION
RRC
Mrmnt reports
Mrmnt requests
performance counters
NL update
1 PHY ID1 GLOB ID1 IP Addr1
2 PHY ID2 GLOB ID2 IP Addr2
3 PHY ID3 GLOB ID3 N/A

FIG. 7

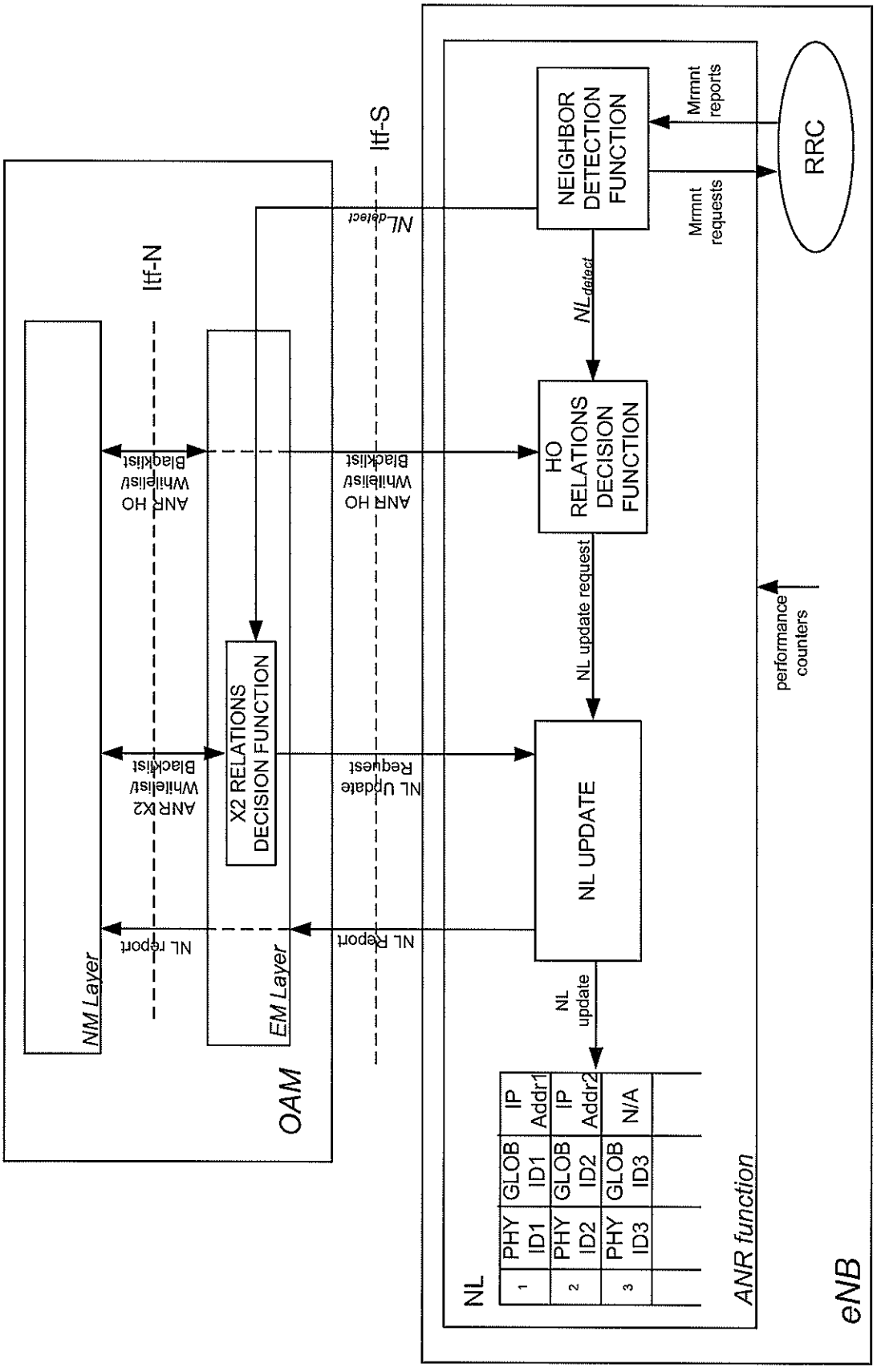

OAM
NM Layer
EM Layer
Itf-N
Itf-S
NL report
ANR X2 Whitelist/ Blacklist
X2 RELATIONS DECISION FUNCTION
NL Update Request
NL report
ANR HO Whitelist/ Blacklist
HO RELATIONS DECISION FUNCTION
NL update request
NL UPDATE
NL update
NL
1 PHY ID1 GLOB ID1 IP Addr1
2 PHY ID2 GLOB ID2 IP Addr2
3 PHY ID3 GLOB ID3 N/A
ANR function
NL_detect
NEIGHBOR DETECTION FUNCTION
Mrmnt reports
Mrmnt requests
RRC
performance counters
eNB

FIG. 8

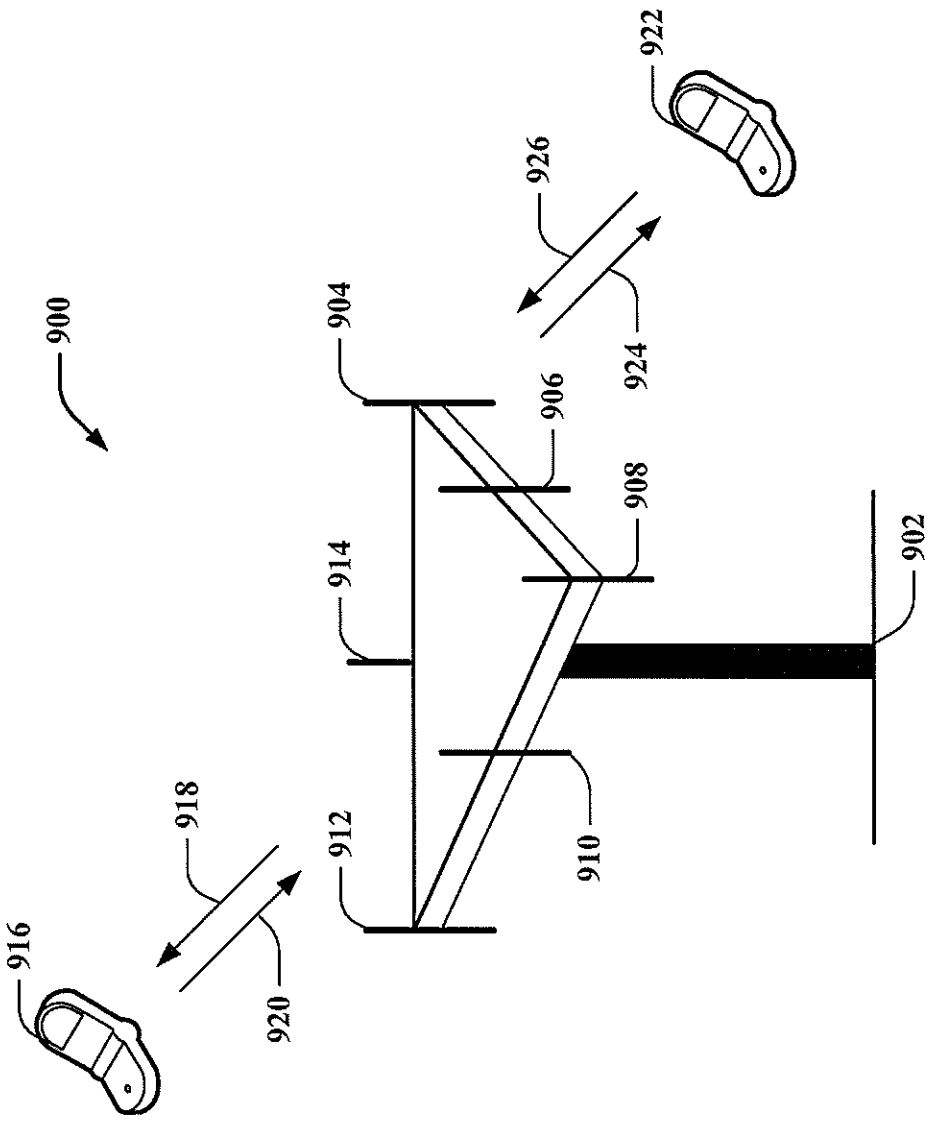


FIG. 9

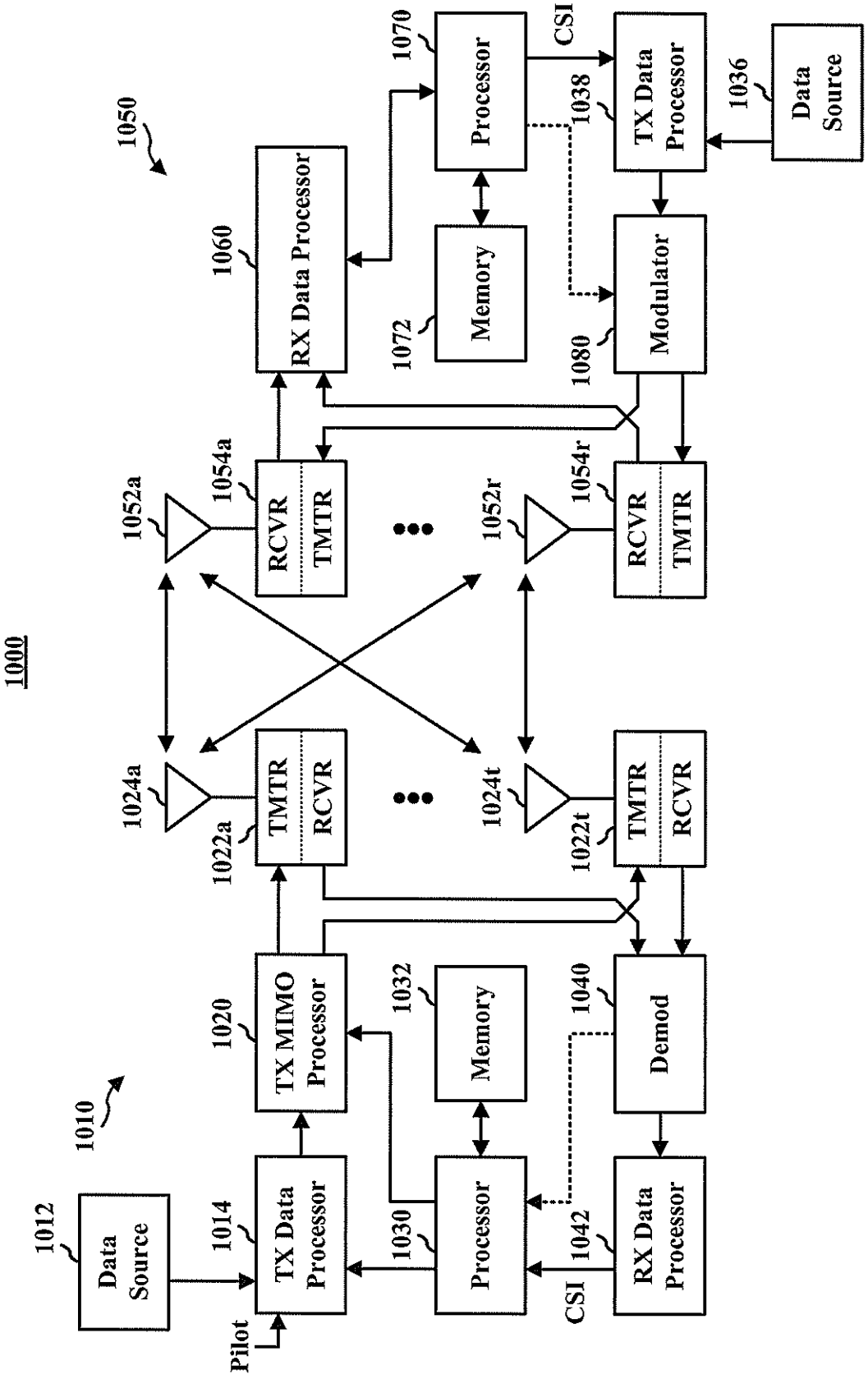

1000
1010
1012
Data Source
1014
TX Data Processor
Pilot
1020
TX MIMO Processor
1022a
TMTR
RCVR
1024a
1030
Processor
1032
Memory
1040
Demod
1042
RX Data Processor
CSI
1050
1052a
1054a
RCVR
TMTR
1052r
1054r
RCVR
TMTR
1022t
TMTR
RCVR
1024t
1060
RX Data Processor
1070
Processor
1072
Memory
1080
Modulator
1038
TX Data Processor
CSI
1036
Data Source

FIG. 10

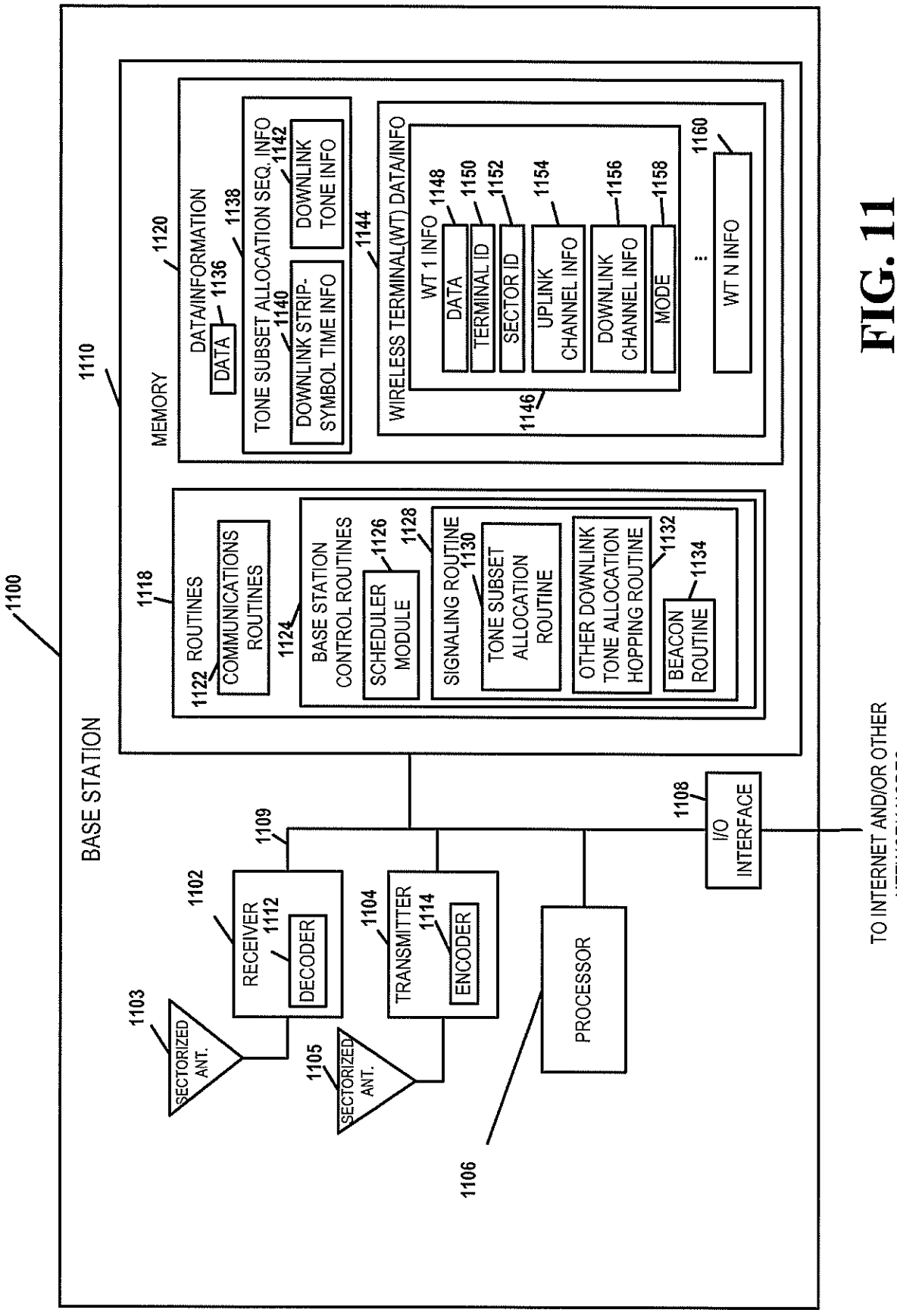

1100
BASE STATION
1110
MEMORY
1120
DATA/INFORMATION
DATA
1136
TONE SUBSET ALLOCATION SEQ. INFO
1138
DOWNLINK STRIP-SYMBOL TIME INFO
1140
DOWNLINK TONE INFO
1142
1144
WIRELESS TERMINAL(WT) DATA/INFO
WT 1 INFO
1148
DATA
1150
TERMINAL ID
1152
SECTOR ID
1154
UPLINK CHANNEL INFO
DOWNLINK CHANNEL INFO
1156
MODE
1158
1146
WT N INFO
1160
1118
ROUTINES
1122
COMMUNICATIONS ROUTINES
1124
BASE STATION CONTROL ROUTINES
SCHEDULER MODULE
1126
1128
SIGNALING ROUTINE
1130
TONE SUBSET ALLOCATION ROUTINE
OTHER DOWNLINK TONE ALLOCATION HOPPING ROUTINE
1132
BEACON ROUTINE
1134
1108
I/O INTERFACE
1109
1102
RECEIVER
1112
DECODER
1104
TRANSMITTER
1114
ENCODER
1103
SECTORIZED ANT.
1105
SECTORIZED ANT.
PROCESSOR
1106
TO INTERNET AND/OR OTHER NETWORK NODES

FIG. 11

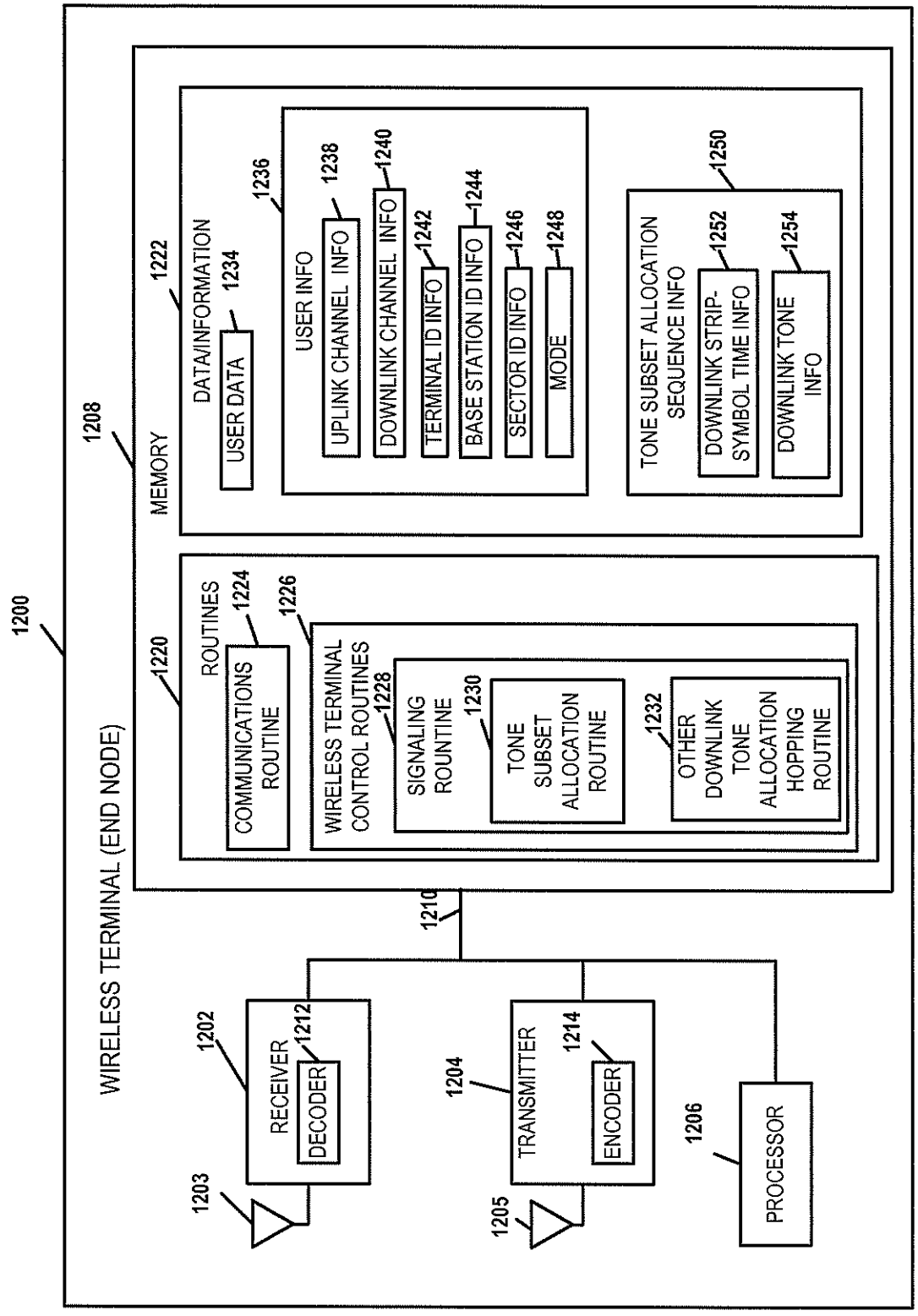

1200
WIRELESS TERMINAL (END NODE)
1208
MEMORY
1222
DATA/INFORMATION
1234
USER DATA
1236
USER INFO
1238
UPLINK CHANNEL INFO
1240
DOWNLINK CHANNEL INFO
1242
TERMINAL ID INFO
1244
BASE STATION ID INFO
1246
SECTOR ID INFO
1248
MODE
1250
TONE SUBSET ALLOCATION SEQUENCE INFO
1252
DOWNLINK STRIP-SYMBOL TIME INFO
1254
DOWNLINK TONE INFO
1220
ROUTINES
1224
COMMUNICATIONS ROUTINE
1226
WIRELESS TERMINAL CONTROL ROUTINES
1228
SIGNALING ROUNTINE
1230
TONE SUBSET ALLOCATION ROUTINE
1232
OTHER DOWNLINK TONE ALLOCATION HOPPING ROUTINE
1210
1202
RECEIVER
1212
DECODER
1203
1204
TRANSMITTER
1214
ENCODER
1205
1206
PROCESSOR

FIG. 12