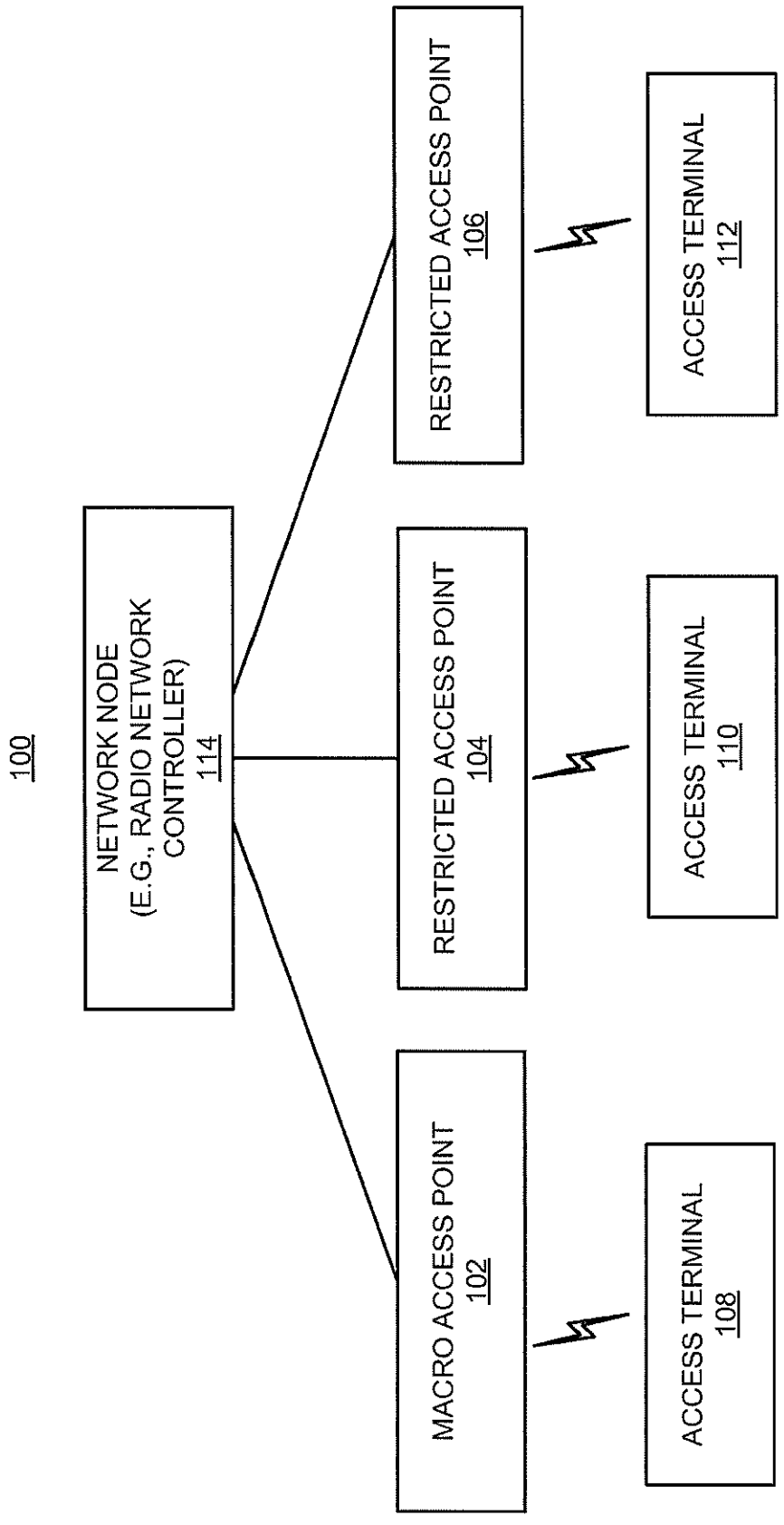

100
NETWORK NODE
(E.G., RADIO NETWORK
CONTROLLER)
114
MACRO ACCESS POINT
102
RESTRICTED ACCESS POINT
104
RESTRICTED ACCESS POINT
106
ACCESS TERMINAL
108
ACCESS TERMINAL
110
ACCESS TERMINAL
112

FIG. 1

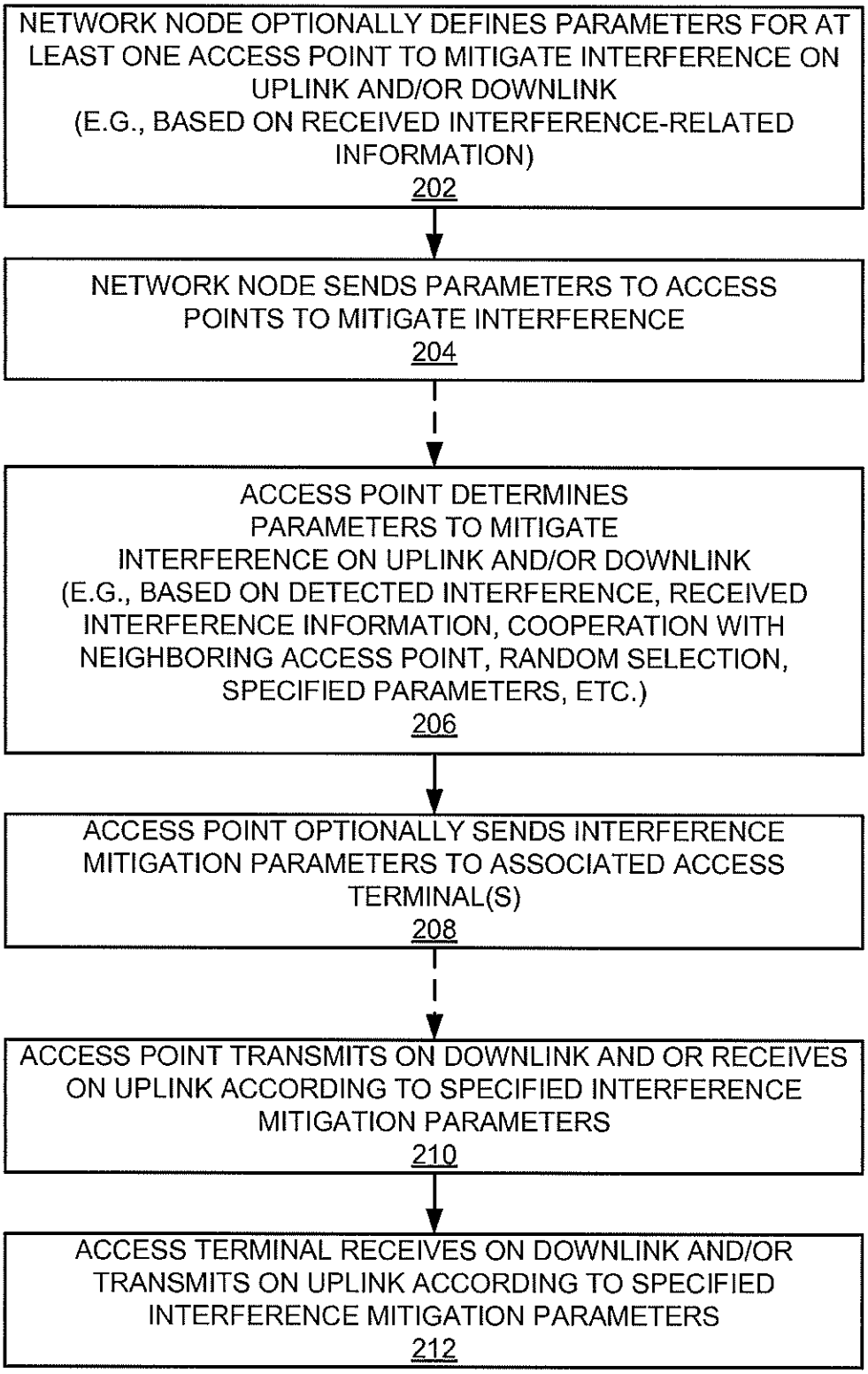

NETWORK NODE OPTIONALLY DEFINES PARAMETERS FOR AT LEAST ONE ACCESS POINT TO MITIGATE INTERFERENCE ON UPLINK AND/OR DOWNLINK (E.G., BASED ON RECEIVED INTERFERENCE-RELATED INFORMATION)
202
NETWORK NODE SENDS PARAMETERS TO ACCESS POINTS TO MITIGATE INTERFERENCE
204
ACCESS POINT DETERMINES PARAMETERS TO MITIGATE INTERFERENCE ON UPLINK AND/OR DOWNLINK (E.G., BASED ON DETECTED INTERFERENCE, RECEIVED INTERFERENCE INFORMATION, COOPERATION WITH NEIGHBORING ACCESS POINT, RANDOM SELECTION, SPECIFIED PARAMETERS, ETC.)
206
ACCESS POINT OPTIONALLY SENDS INTERFERENCE MITIGATION PARAMETERS TO ASSOCIATED ACCESS TERMINAL(S)
208
ACCESS POINT TRANSMITS ON DOWNLINK AND OR RECEIVES ON UPLINK ACCORDING TO SPECIFIED INTERFERENCE MITIGATION PARAMETERS
210
ACCESS TERMINAL RECEIVES ON DOWNLINK AND/OR TRANSMITS ON UPLINK ACCORDING TO SPECIFIED INTERFERENCE MITIGATION PARAMETERS
212

FIG. 2

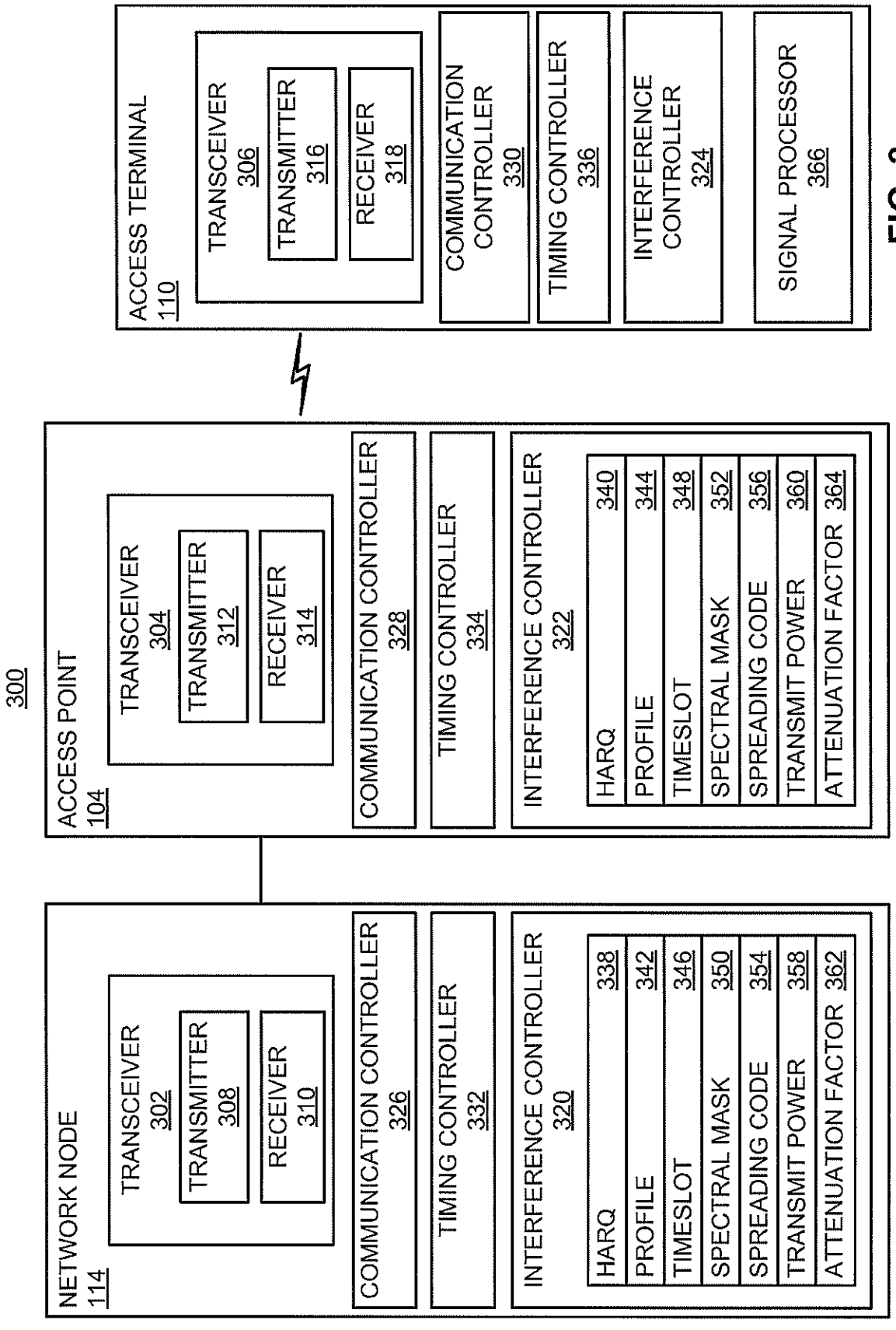

300
NETWORK NODE
114
TRANSCEIVER
302
TRANSMITTER
308
RECEIVER
310
COMMUNICATION CONTROLLER
326
TIMING CONTROLLER
332
INTERFERENCE CONTROLLER
320
HARQ 338
PROFILE 342
TIMESLOT 346
SPECTRAL MASK 350
SPREADING CODE 354
TRANSMIT POWER 358
ATTENUATION FACTOR 362
ACCESS POINT
104
TRANSCEIVER
304
TRANSMITTER
312
RECEIVER
314
COMMUNICATION CONTROLLER
328
TIMING CONTROLLER
334
INTERFERENCE CONTROLLER
322
HARQ 340
PROFILE 344
TIMESLOT 348
SPECTRAL MASK 352
SPREADING CODE 356
TRANSMIT POWER 360
ATTENUATION FACTOR 364
ACCESS TERMINAL
110
TRANSCEIVER
306
TRANSMITTER
316
RECEIVER
318
COMMUNICATION CONTROLLER
330
TIMING CONTROLLER
336
INTERFERENCE CONTROLLER
324
SIGNAL PROCESSOR
366

FIG. 3

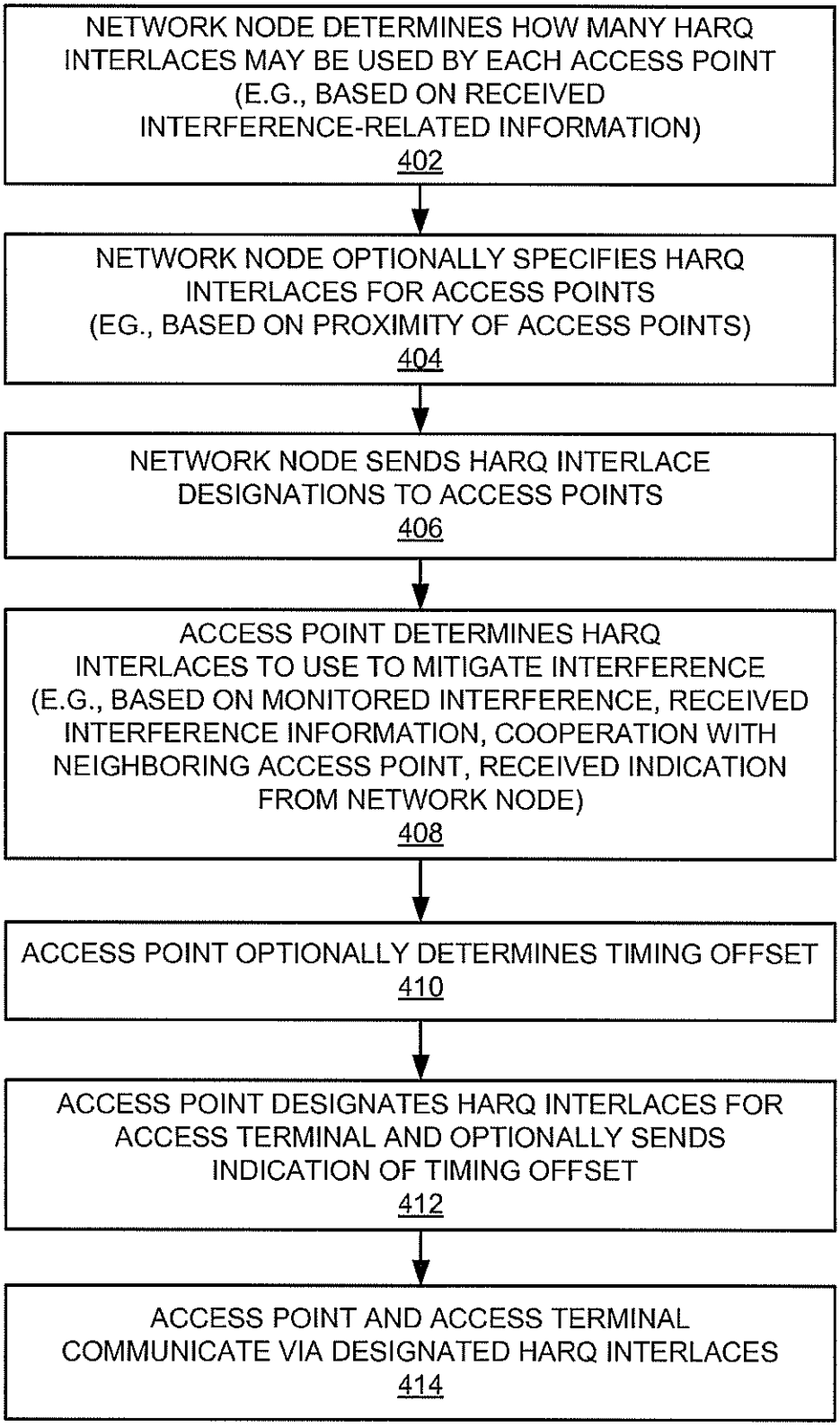

NETWORK NODE DETERMINES HOW MANY HARQ INTERLACES MAY BE USED BY EACH ACCESS POINT (E.G., BASED ON RECEIVED INTERFERENCE-RELATED INFORMATION)
402
NETWORK NODE OPTIONALLY SPECIFIES HARQ INTERLACES FOR ACCESS POINTS (EG., BASED ON PROXIMITY OF ACCESS POINTS)
404
NETWORK NODE SENDS HARQ INTERLACE DESIGNATIONS TO ACCESS POINTS
406
ACCESS POINT DETERMINES HARQ INTERLACES TO USE TO MITIGATE INTERFERENCE (E.G., BASED ON MONITORED INTERFERENCE, RECEIVED INTERFERENCE INFORMATION, COOPERATION WITH NEIGHBORING ACCESS POINT, RECEIVED INDICATION FROM NETWORK NODE)
408
ACCESS POINT OPTIONALLY DETERMINES TIMING OFFSET
410
ACCESS POINT DESIGNATES HARQ INTERLACES FOR ACCESS TERMINAL AND OPTIONALLY SENDS INDICATION OF TIMING OFFSET
412
ACCESS POINT AND ACCESS TERMINAL COMMUNICATE VIA DESIGNATED HARQ INTERLACES
414

FIG. 4

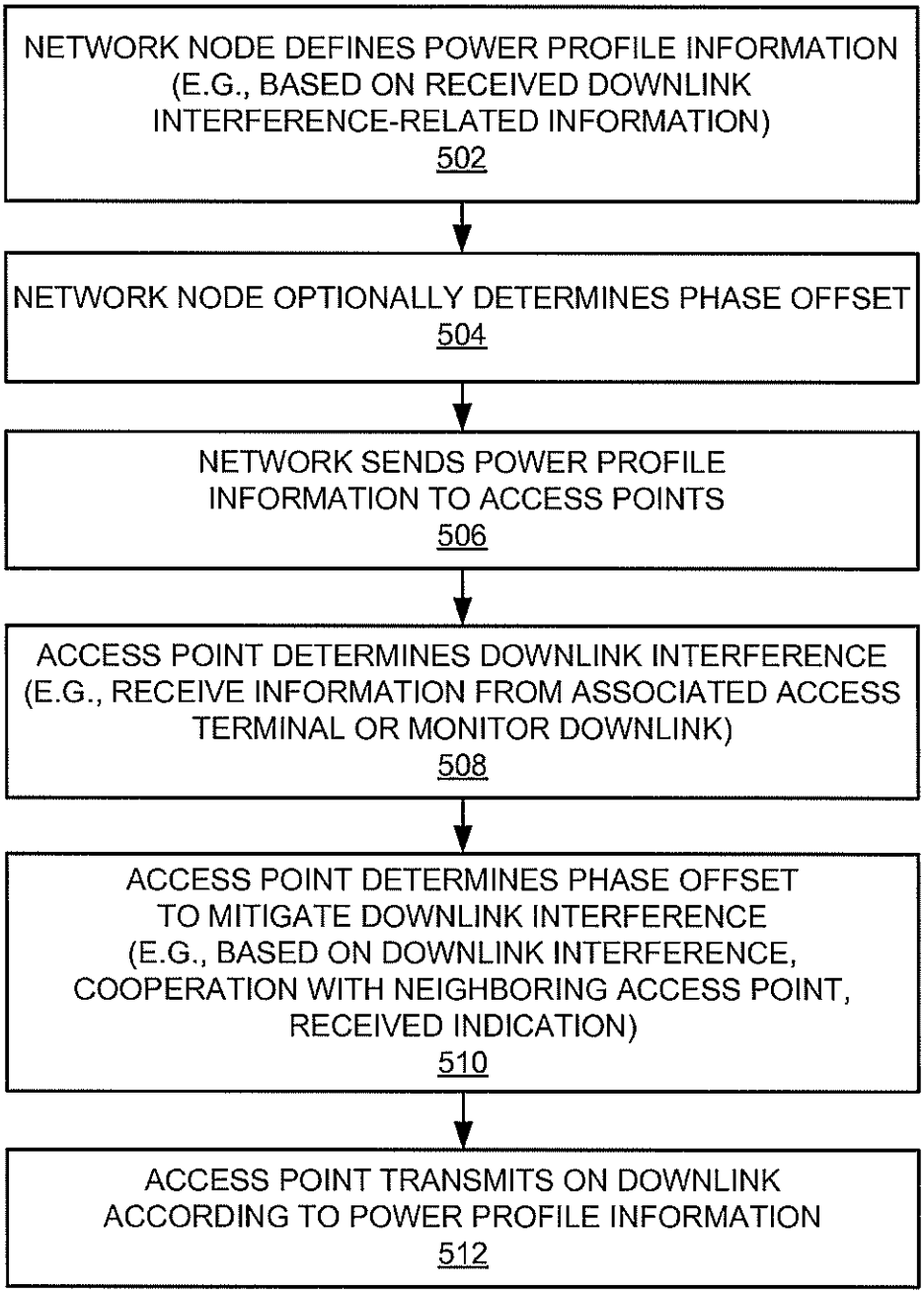

NETWORK NODE DEFINES POWER PROFILE INFORMATION (E.G., BASED ON RECEIVED DOWNLINK INTERFERENCE-RELATED INFORMATION)
502
NETWORK NODE OPTIONALLY DETERMINES PHASE OFFSET
504
NETWORK SENDS POWER PROFILE INFORMATION TO ACCESS POINTS
506
ACCESS POINT DETERMINES DOWNLINK INTERFERENCE (E.G., RECEIVE INFORMATION FROM ASSOCIATED ACCESS TERMINAL OR MONITOR DOWNLINK)
508
ACCESS POINT DETERMINES PHASE OFFSET TO MITIGATE DOWNLINK INTERFERENCE (E.G., BASED ON DOWNLINK INTERFERENCE, COOPERATION WITH NEIGHBORING ACCESS POINT, RECEIVED INDICATION)
510
ACCESS POINT TRANSMITS ON DOWNLINK ACCORDING TO POWER PROFILE INFORMATION
512

FIG. 5

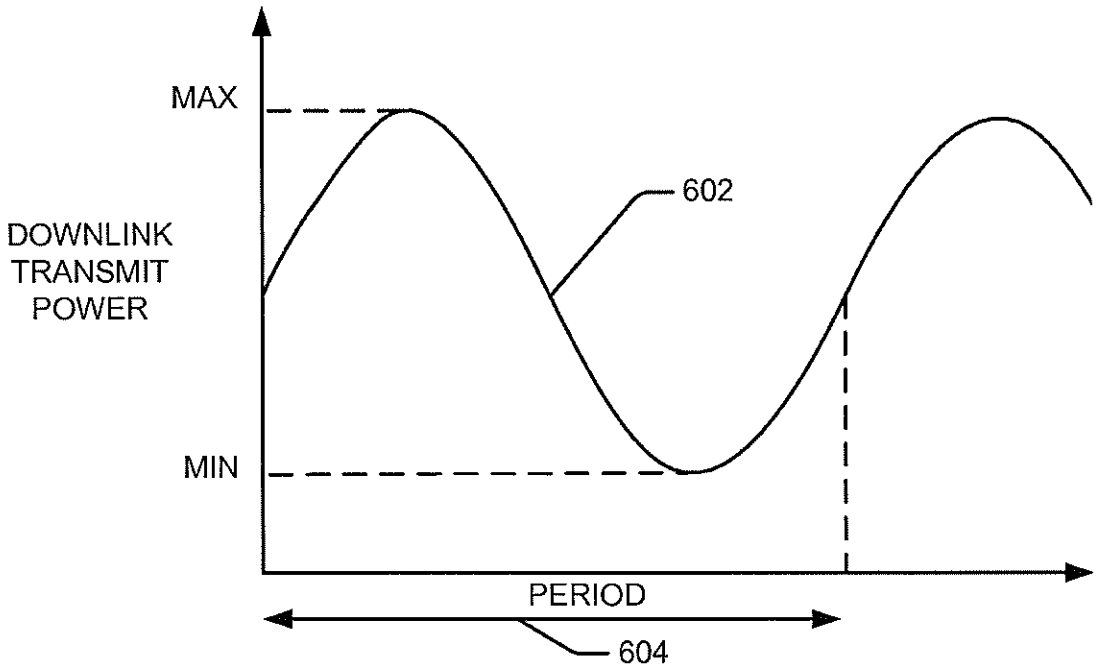


FIG. 6

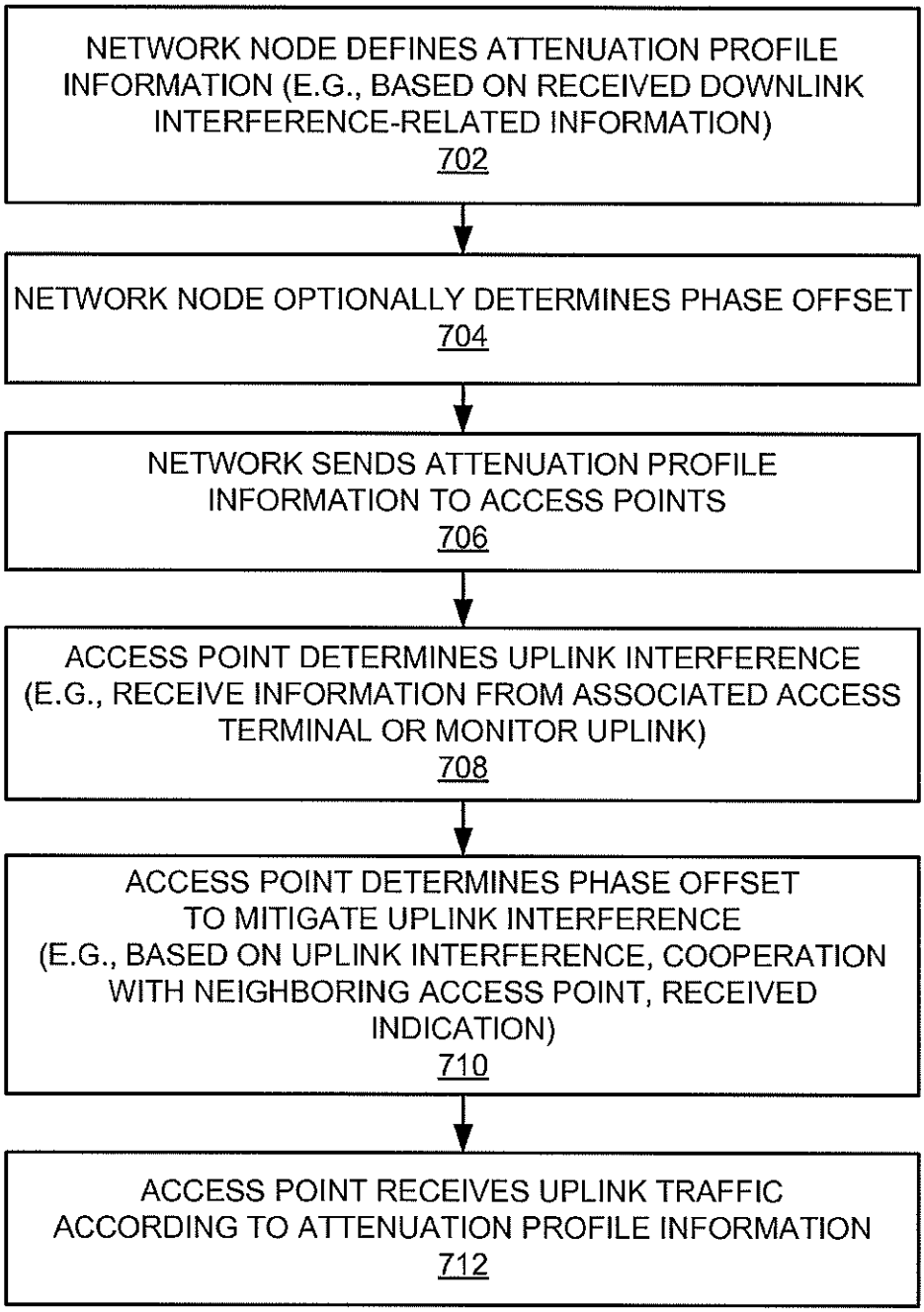

NETWORK NODE DEFINES ATTENUATION PROFILE INFORMATION (E.G., BASED ON RECEIVED DOWNLINK INTERFERENCE-RELATED INFORMATION)
702
NETWORK NODE OPTIONALLY DETERMINES PHASE OFFSET
704
NETWORK SENDS ATTENUATION PROFILE INFORMATION TO ACCESS POINTS
706
ACCESS POINT DETERMINES UPLINK INTERFERENCE (E.G., RECEIVE INFORMATION FROM ASSOCIATED ACCESS TERMINAL OR MONITOR UPLINK)
708
ACCESS POINT DETERMINES PHASE OFFSET TO MITIGATE UPLINK INTERFERENCE (E.G., BASED ON UPLINK INTERFERENCE, COOPERATION WITH NEIGHBORING ACCESS POINT, RECEIVED INDICATION)
710
ACCESS POINT RECEIVES UPLINK TRAFFIC ACCORDING TO ATTENUATION PROFILE INFORMATION
712

FIG. 7

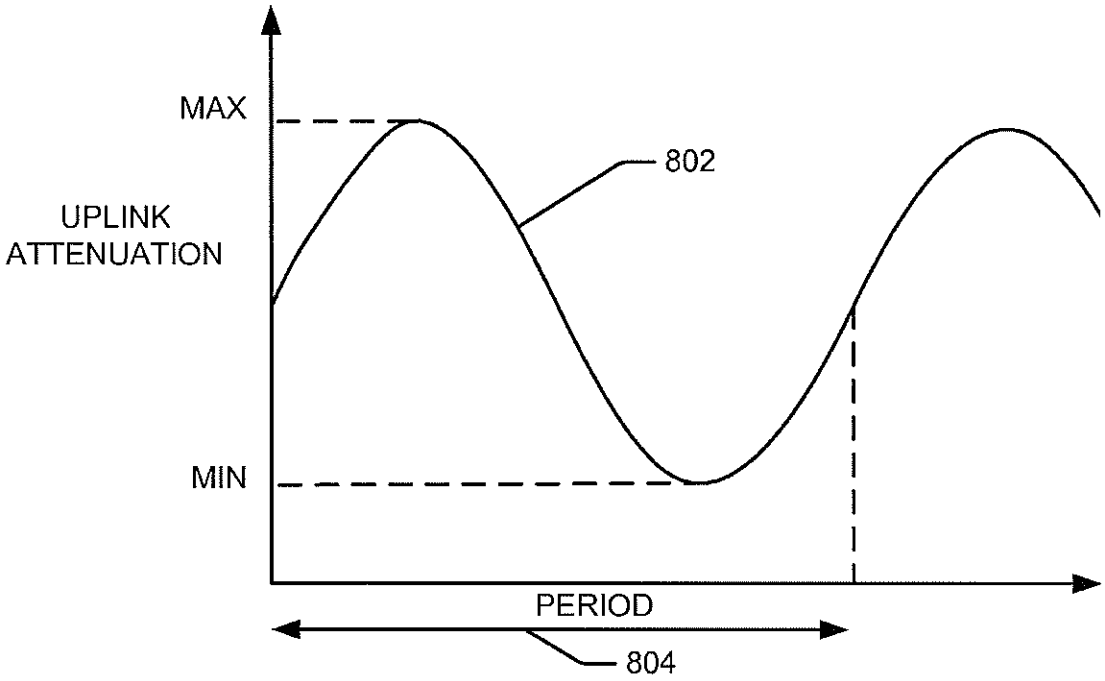


FIG. 8

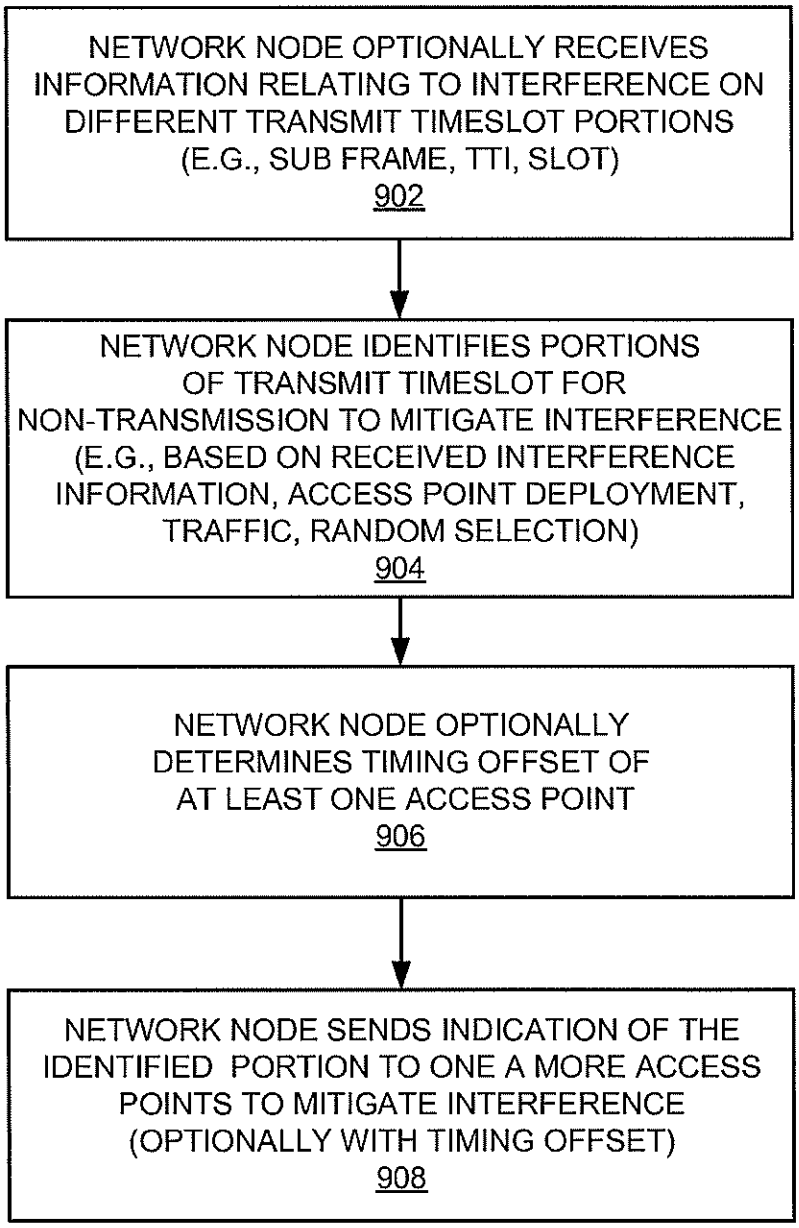

NETWORK NODE OPTIONALLY RECEIVES INFORMATION RELATING TO INTERFERENCE ON DIFFERENT TRANSMIT TIMESLOT PORTIONS (E.G., SUB FRAME, TTI, SLOT)
902
NETWORK NODE IDENTIFIES PORTIONS OF TRANSMIT TIMESLOT FOR NON-TRANSMISSION TO MITIGATE INTERFERENCE (E.G., BASED ON RECEIVED INTERFERENCE INFORMATION, ACCESS POINT DEPLOYMENT, TRAFFIC, RANDOM SELECTION)
904
NETWORK NODE OPTIONALLY DETERMINES TIMING OFFSET OF AT LEAST ONE ACCESS POINT
906
NETWORK NODE SENDS INDICATION OF THE IDENTIFIED PORTION TO ONE A MORE ACCESS POINTS TO MITIGATE INTERFERENCE (OPTIONALLY WITH TIMING OFFSET)
908

FIG. 9

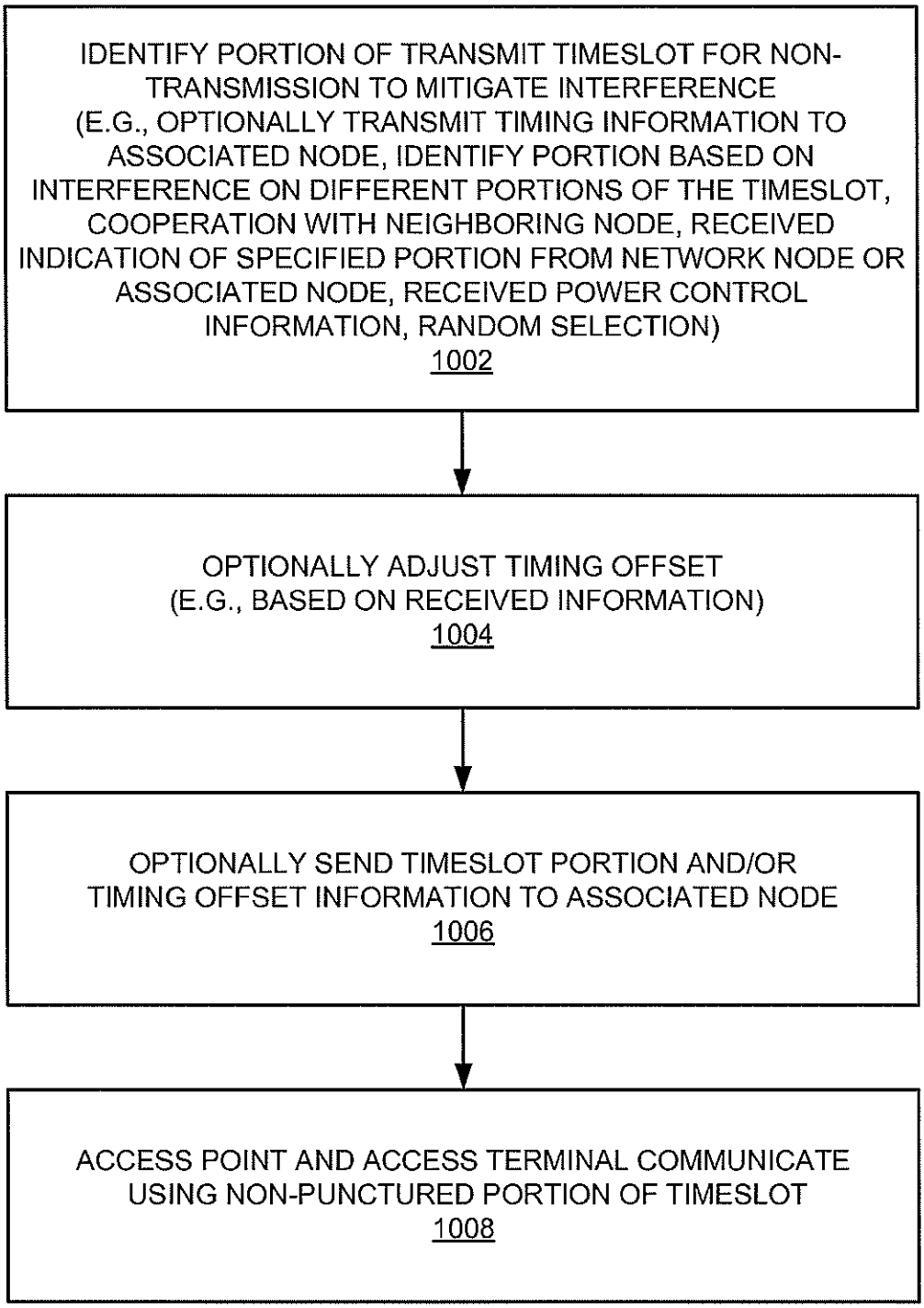

IDENTIFY PORTION OF TRANSMIT TIMESLOT FOR NON-TRANSMISSION TO MITIGATE INTERFERENCE (E.G., OPTIONALLY TRANSMIT TIMING INFORMATION TO ASSOCIATED NODE, IDENTIFY PORTION BASED ON INTERFERENCE ON DIFFERENT PORTIONS OF THE TIMESLOT, COOPERATION WITH NEIGHBORING NODE, RECEIVED INDICATION OF SPECIFIED PORTION FROM NETWORK NODE OR ASSOCIATED NODE, RECEIVED POWER CONTROL INFORMATION, RANDOM SELECTION)
1002
OPTIONALLY ADJUST TIMING OFFSET (E.G., BASED ON RECEIVED INFORMATION)
1004
OPTIONALLY SEND TIMESLOT PORTION AND/OR TIMING OFFSET INFORMATION TO ASSOCIATED NODE
1006
ACCESS POINT AND ACCESS TERMINAL COMMUNICATE USING NON-PUNCTURED PORTION OF TIMESLOT
1008

FIG. 10

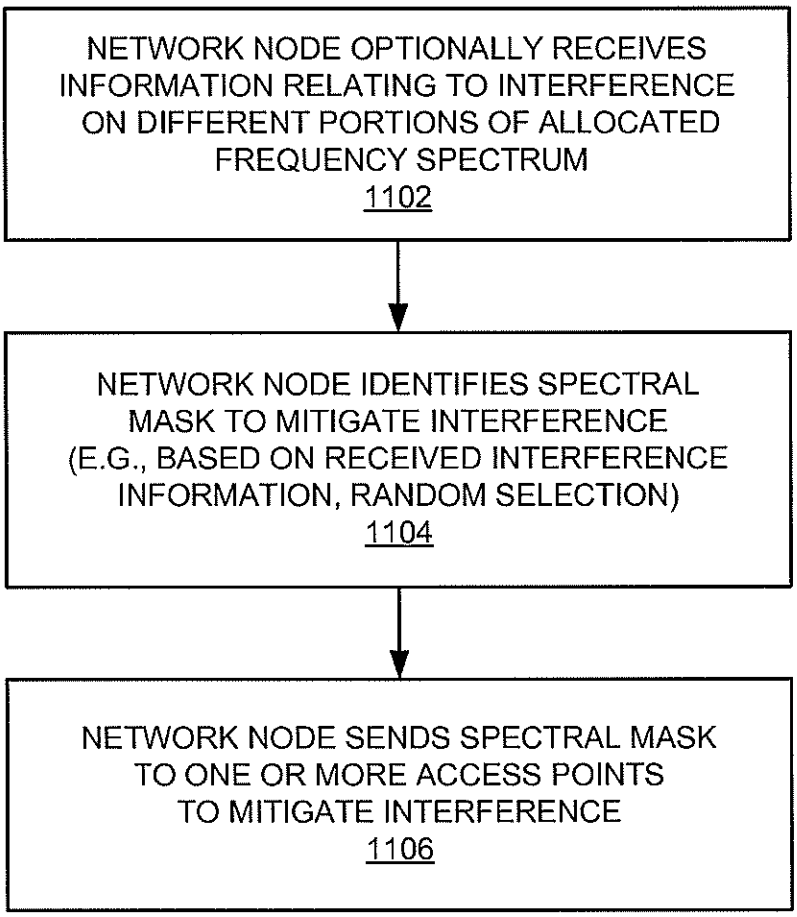

NETWORK NODE OPTIONALLY RECEIVES INFORMATION RELATING TO INTERFERENCE ON DIFFERENT PORTIONS OF ALLOCATED FREQUENCY SPECTRUM
1102
NETWORK NODE IDENTIFIES SPECTRAL MASK TO MITIGATE INTERFERENCE (E.G., BASED ON RECEIVED INTERFERENCE INFORMATION, RANDOM SELECTION)
1104
NETWORK NODE SENDS SPECTRAL MASK TO ONE OR MORE ACCESS POINTS TO MITIGATE INTERFERENCE
1106

FIG. 11

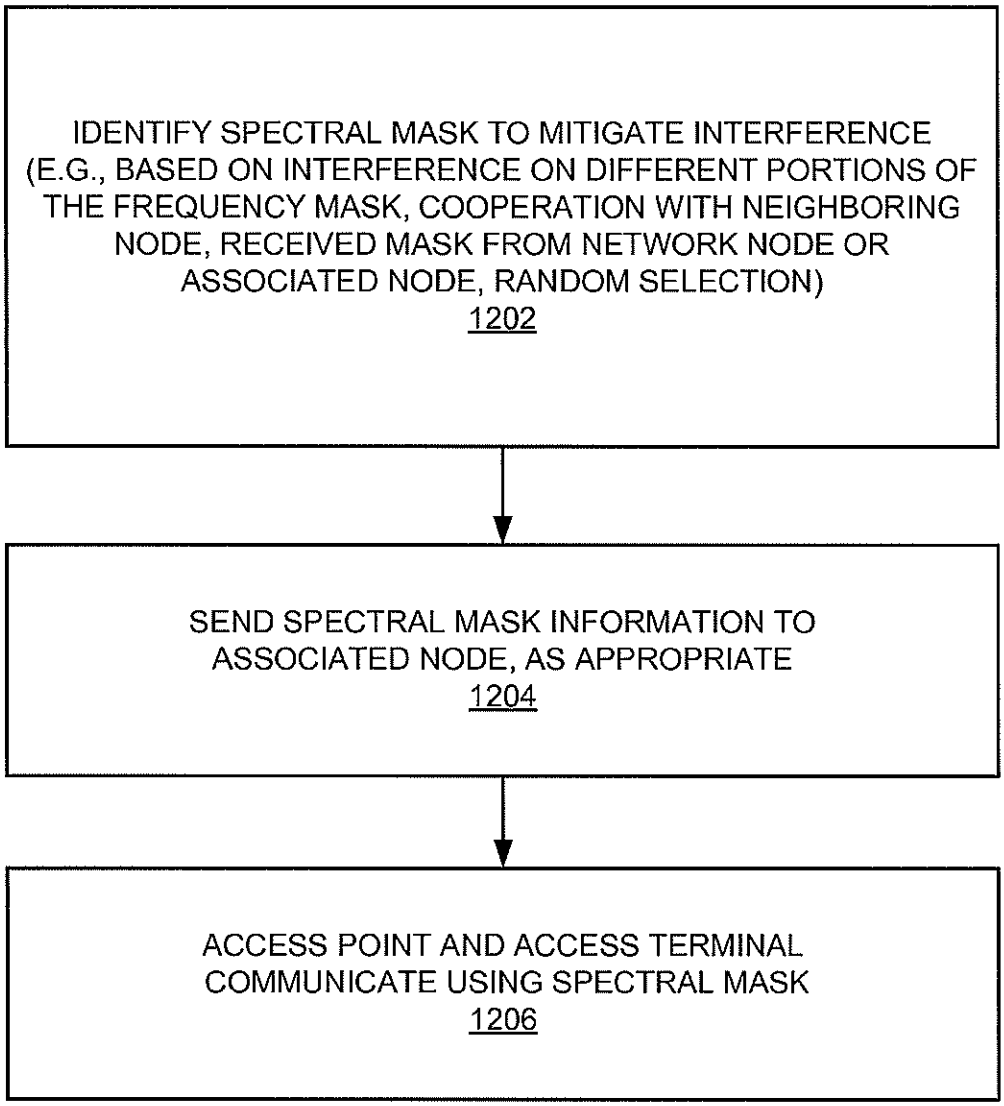

IDENTIFY SPECTRAL MASK TO MITIGATE INTERFERENCE (E.G., BASED ON INTERFERENCE ON DIFFERENT PORTIONS OF THE FREQUENCY MASK, COOPERATION WITH NEIGHBORING NODE, RECEIVED MASK FROM NETWORK NODE OR ASSOCIATED NODE, RANDOM SELECTION)
1202
SEND SPECTRAL MASK INFORMATION TO ASSOCIATED NODE, AS APPROPRIATE
1204
ACCESS POINT AND ACCESS TERMINAL COMMUNICATE USING SPECTRAL MASK
1206

FIG. 12

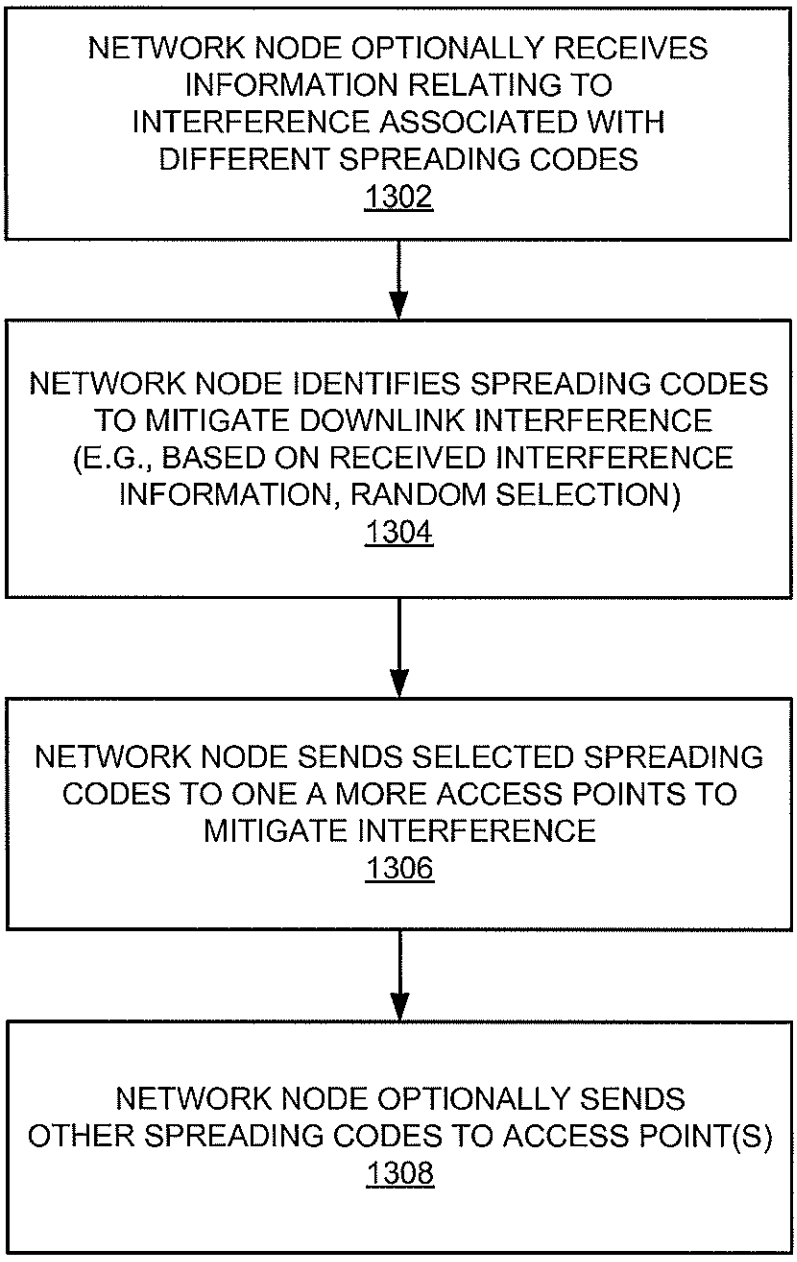

NETWORK NODE OPTIONALLY RECEIVES INFORMATION RELATING TO INTERFERENCE ASSOCIATED WITH DIFFERENT SPREADING CODES
1302
NETWORK NODE IDENTIFIES SPREADING CODES TO MITIGATE DOWNLINK INTERFERENCE (E.G., BASED ON RECEIVED INTERFERENCE INFORMATION, RANDOM SELECTION)
1304
NETWORK NODE SENDS SELECTED SPREADING CODES TO ONE A MORE ACCESS POINTS TO MITIGATE INTERFERENCE
1306
NETWORK NODE OPTIONALLY SENDS OTHER SPREADING CODES TO ACCESS POINT(S)
1308

FIG. 13

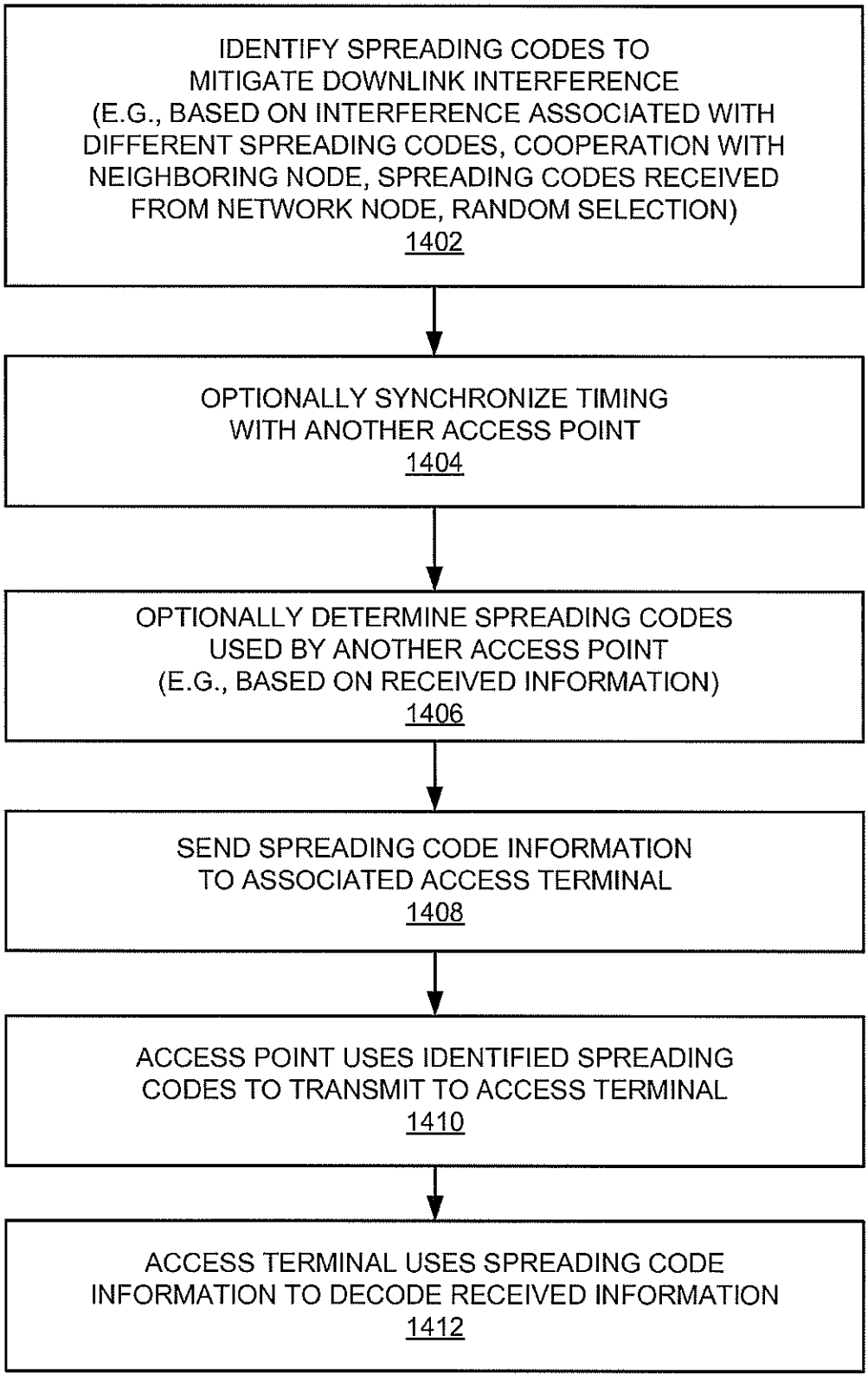

IDENTIFY SPREADING CODES TO MITIGATE DOWNLINK INTERFERENCE (E.G., BASED ON INTERFERENCE ASSOCIATED WITH DIFFERENT SPREADING CODES, COOPERATION WITH NEIGHBORING NODE, SPREADING CODES RECEIVED FROM NETWORK NODE, RANDOM SELECTION)
1402
OPTIONALLY SYNCHRONIZE TIMING WITH ANOTHER ACCESS POINT
1404
OPTIONALLY DETERMINE SPREADING CODES USED BY ANOTHER ACCESS POINT (E.G., BASED ON RECEIVED INFORMATION)
1406
SEND SPREADING CODE INFORMATION TO ASSOCIATED ACCESS TERMINAL
1408
ACCESS POINT USES IDENTIFIED SPREADING CODES TO TRANSMIT TO ACCESS TERMINAL
1410
ACCESS TERMINAL USES SPREADING CODE INFORMATION TO DECODE RECEIVED INFORMATION
1412

FIG. 14

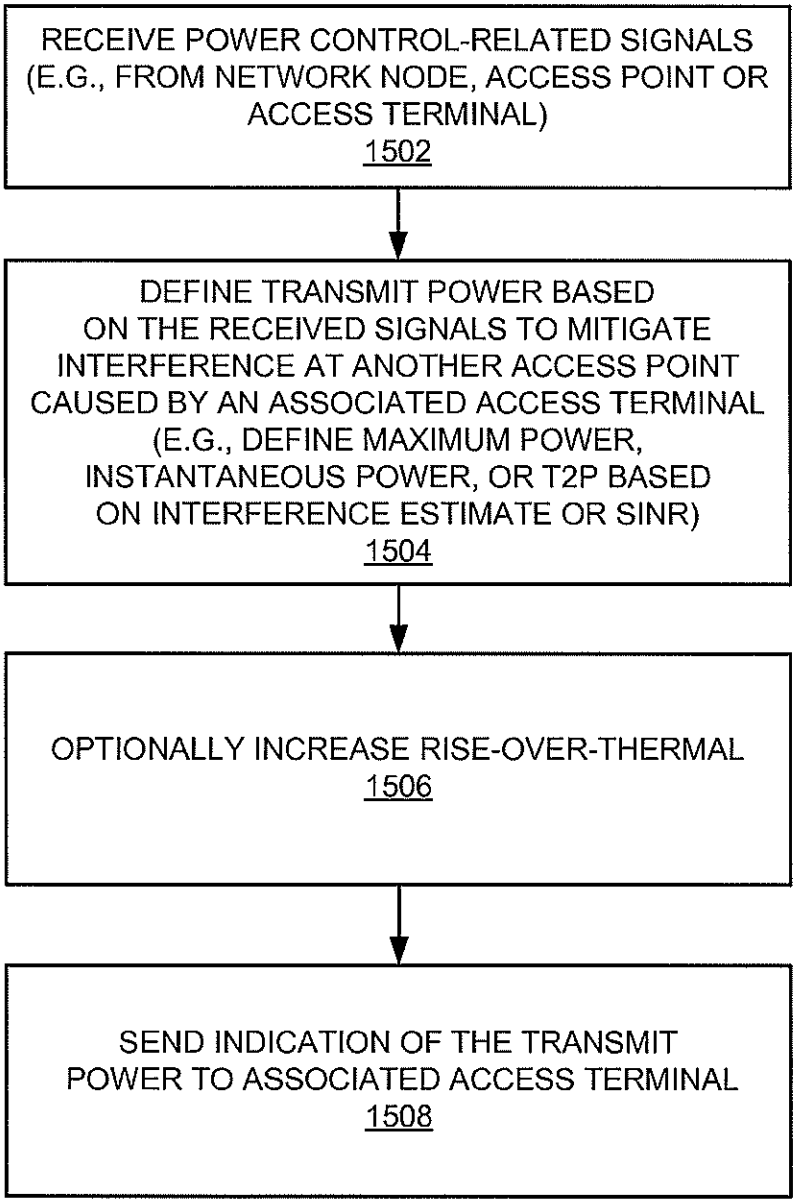

RECEIVE POWER CONTROL-RELATED SIGNALS (E.G., FROM NETWORK NODE, ACCESS POINT OR ACCESS TERMINAL)
1502
DEFINE TRANSMIT POWER BASED ON THE RECEIVED SIGNALS TO MITIGATE INTERFERENCE AT ANOTHER ACCESS POINT CAUSED BY AN ASSOCIATED ACCESS TERMINAL (E.G., DEFINE MAXIMUM POWER, INSTANTANEOUS POWER, OR T2P BASED ON INTERFERENCE ESTIMATE OR SINR)
1504
OPTIONALLY INCREASE RISE-OVER-THERMAL
1506
SEND INDICATION OF THE TRANSMIT POWER TO ASSOCIATED ACCESS TERMINAL
1508

FIG. 15

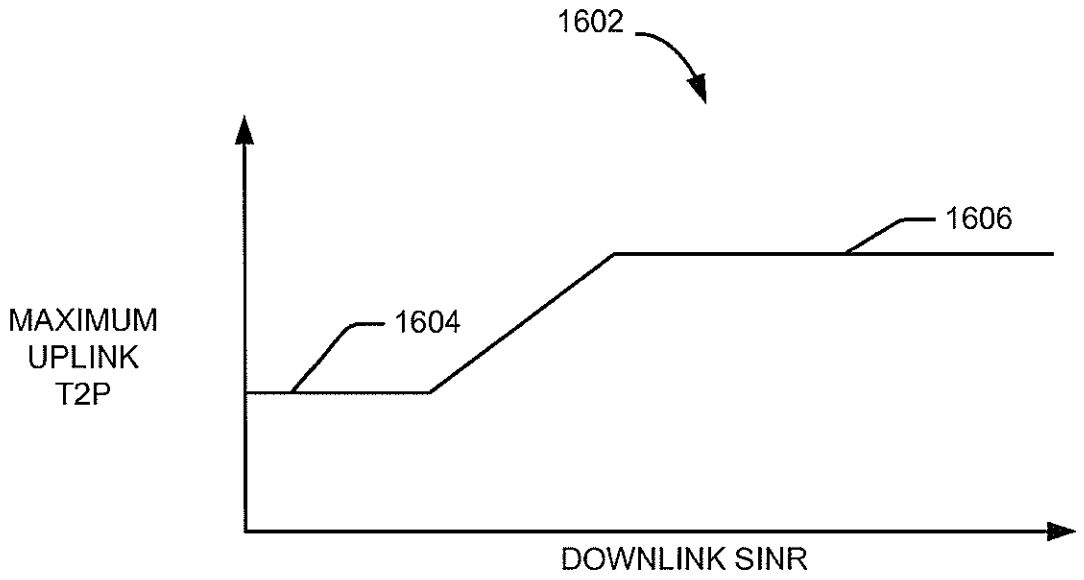


FIG. 16

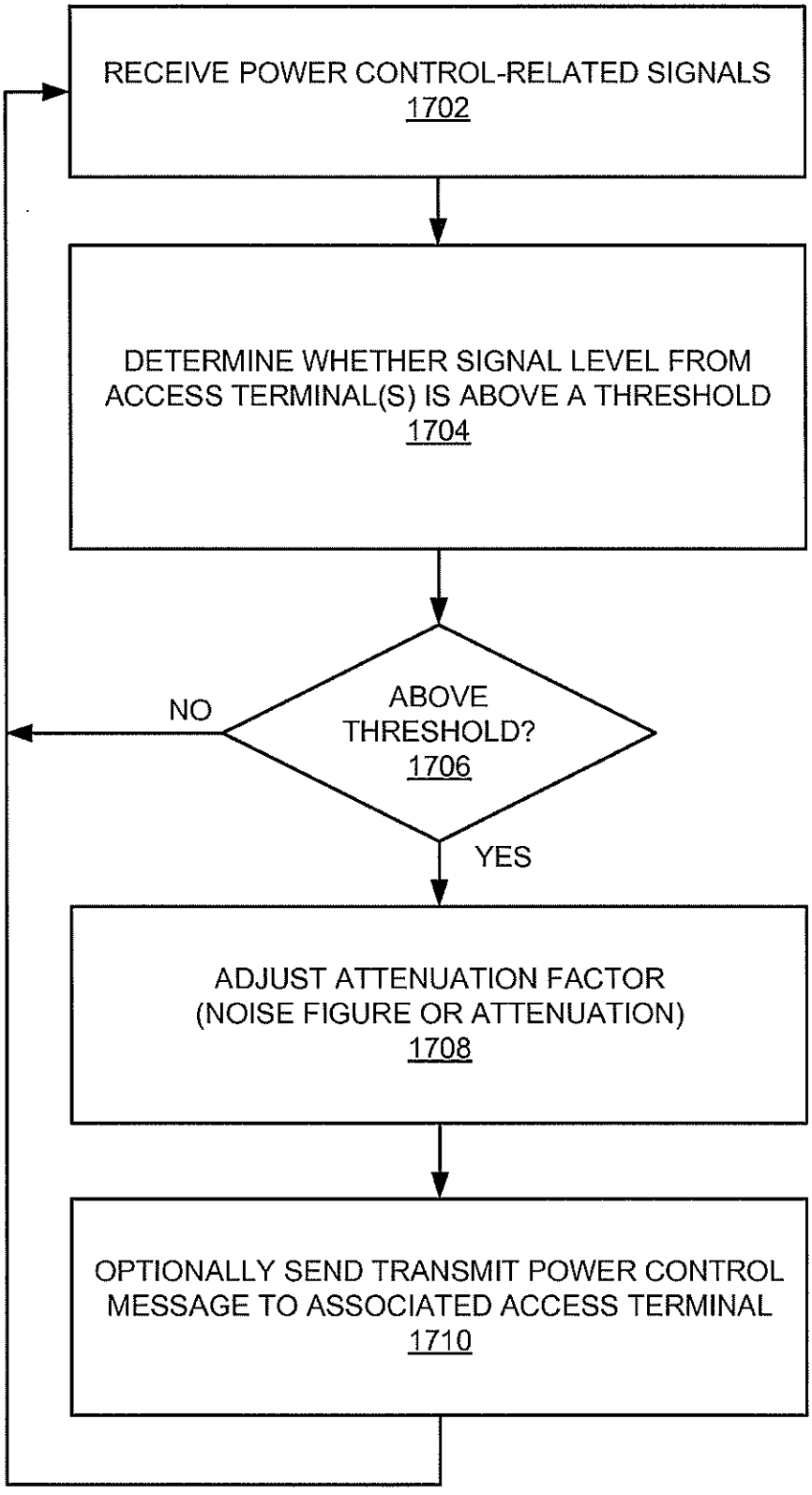

RECEIVE POWER CONTROL-RELATED SIGNALS
1702
DETERMINE WHETHER SIGNAL LEVEL FROM ACCESS TERMINAL(S) IS ABOVE A THRESHOLD
1704
ABOVE THRESHOLD?
1706
NO
YES
ADJUST ATTENUATION FACTOR (NOISE FIGURE OR ATTENUATION)
1708
OPTIONALLY SEND TRANSMIT POWER CONTROL MESSAGE TO ASSOCIATED ACCESS TERMINAL
1710

FIG. 17

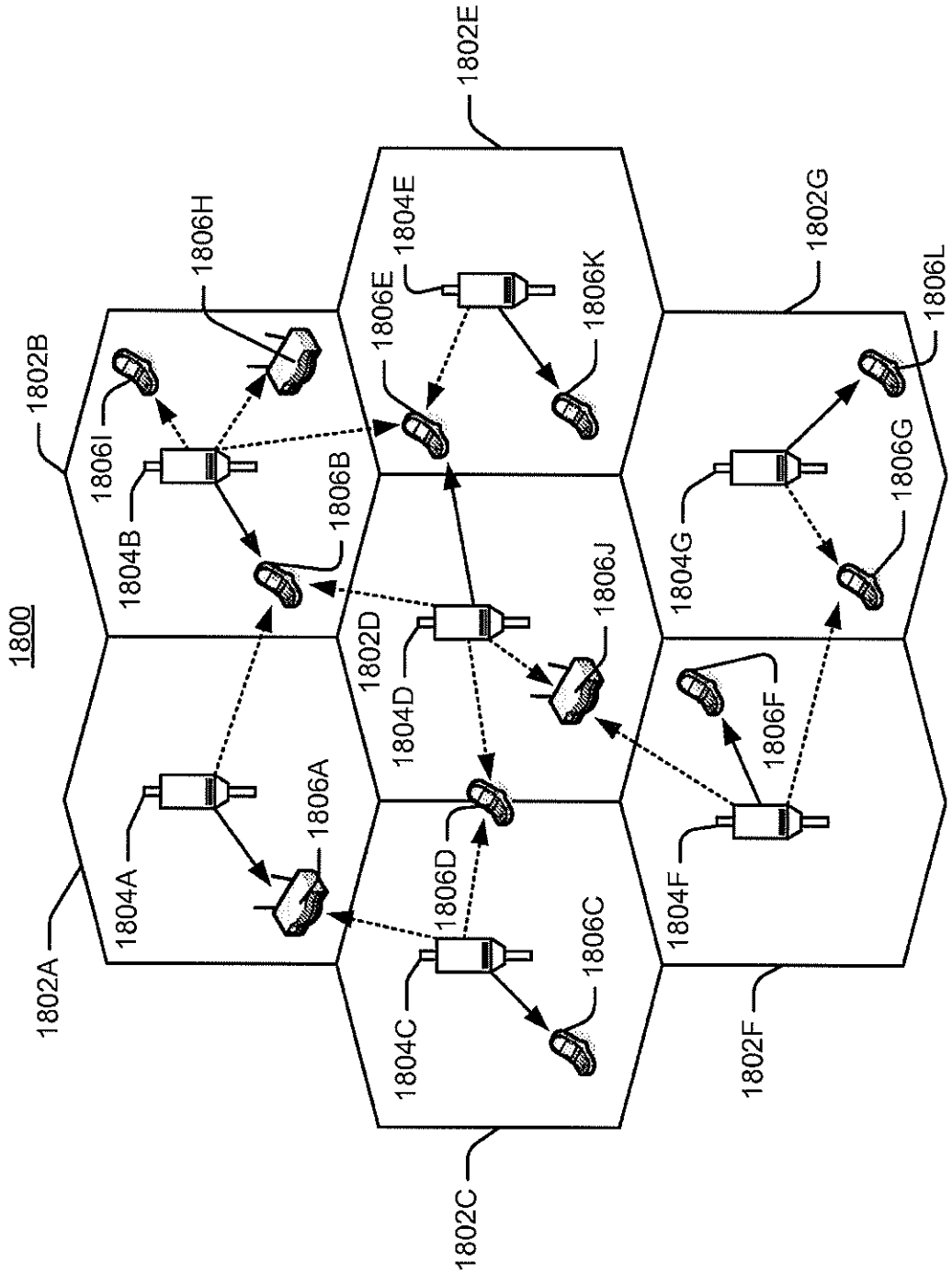

1800
1802A
1802B
1802C
1802D
1802E
1802F
1802G
1804A
1804B
1804C
1804D
1804E
1804F
1804G
1806A
1806B
1806C
1806D
1806E
1806F
1806G
1806H
1806I
1806J
1806K
1806L

FIG. 18

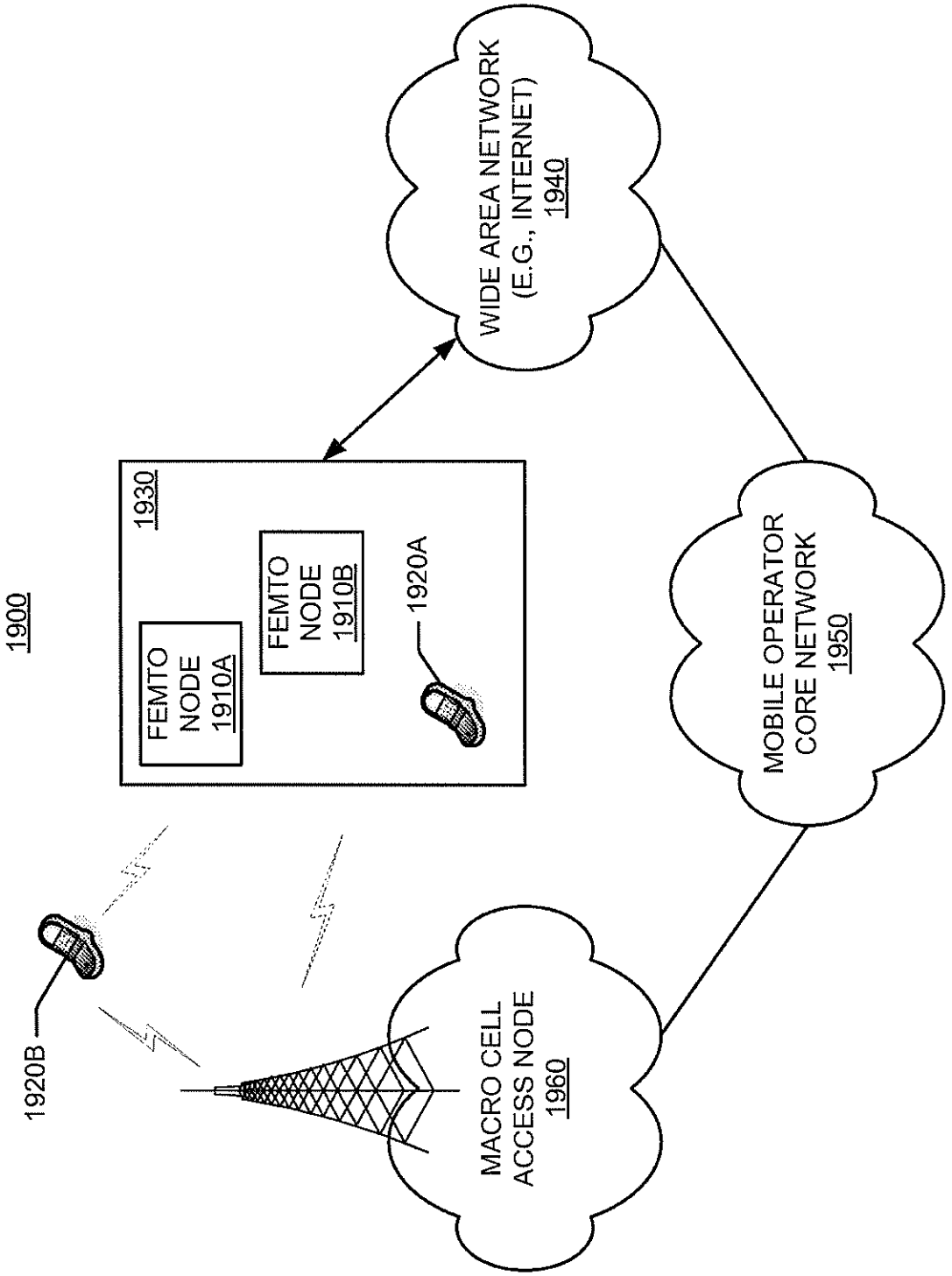

1900
WIDE AREA NETWORK
(E.G., INTERNET)
1940
1930
FEMTO
NODE
1910A
FEMTO
NODE
1910B
1920A
MOBILE OPERATOR
CORE NETWORK
1950
MACRO CELL
ACCESS NODE
1960
1920B

FIG. 19

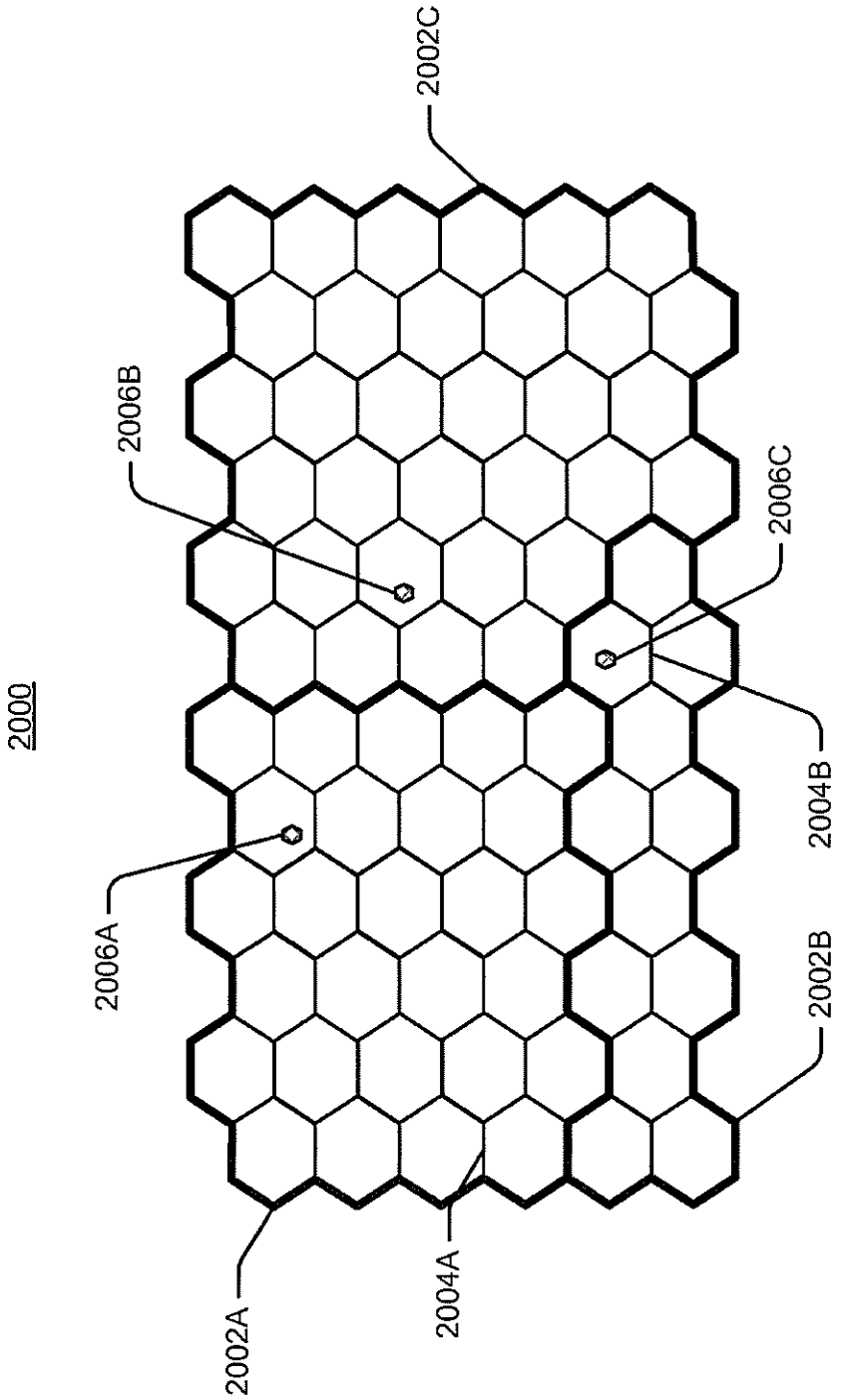


FIG. 20

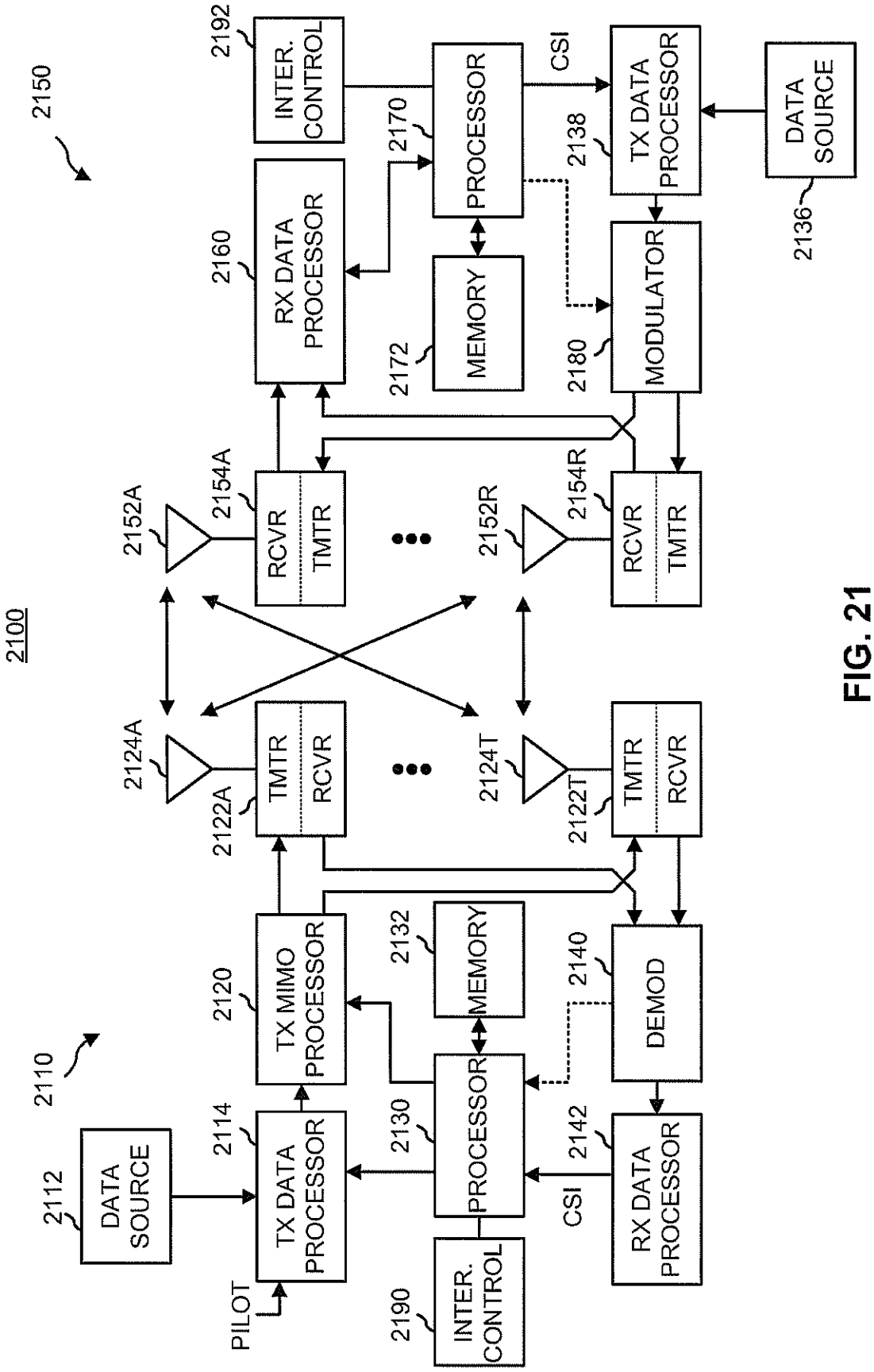

2100
2110
2112
DATA SOURCE
2114
TX DATA PROCESSOR
PILOT
2120
TX MIMO PROCESSOR
2122A
TMTR
RCVR
2124A
2124T
2122T
2130
PROCESSOR
2132
MEMORY
2140
DEMOD
2142
RX DATA PROCESSOR
CSI
2190
INTER. CONTROL
2150
2152A
2154A
RCVR
TMTR
2152R
2154R
2160
RX DATA PROCESSOR
2170
PROCESSOR
2172
MEMORY
2180
MODULATOR
2138
TX DATA PROCESSOR
CSI
2192
INTER. CONTROL
DATA SOURCE
2136

FIG. 21

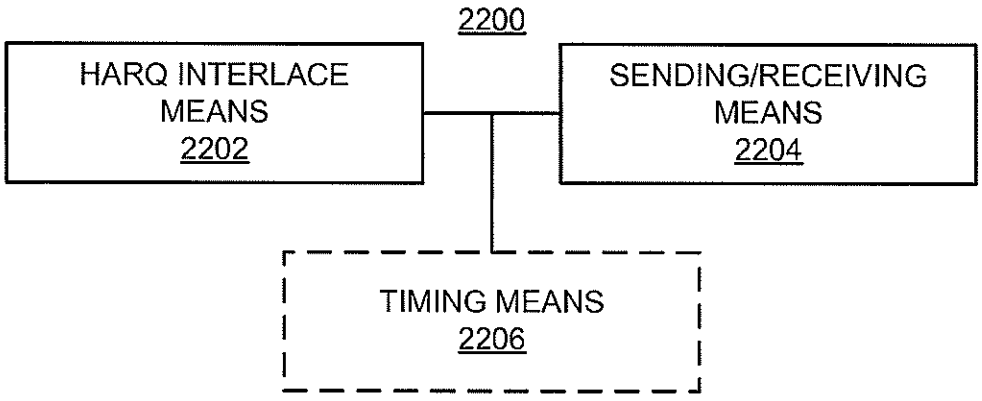


FIG. 22

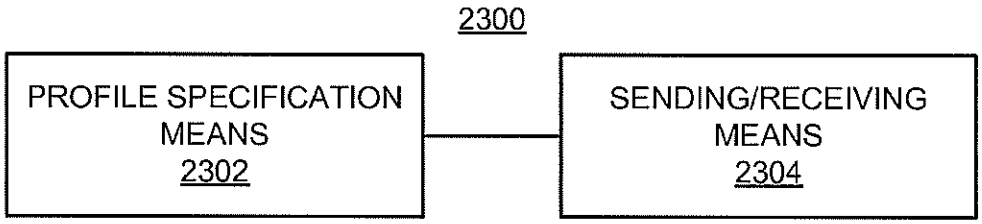


FIG. 23

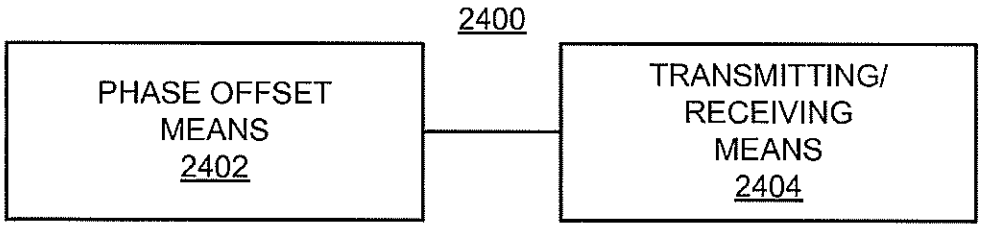


FIG. 24

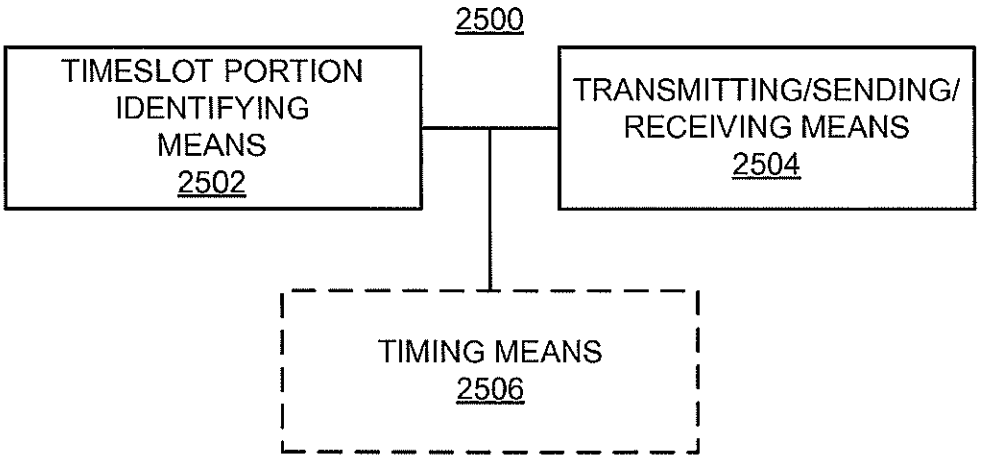

2500
TIMESLOT PORTION IDENTIFYING MEANS 2502
TRANSMITTING/SENDING/ RECEIVING MEANS 2504
TIMING MEANS 2506

FIG. 25

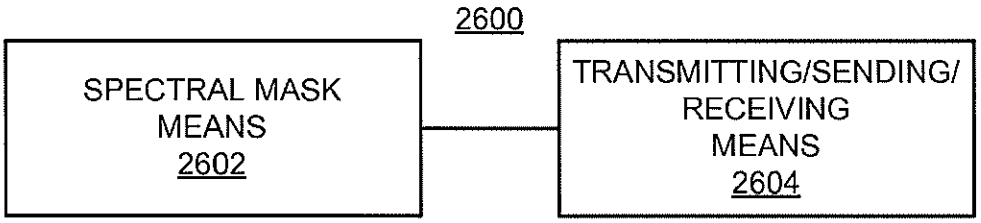

2600
SPECTRAL MASK MEANS 2602
TRANSMITTING/SENDING/ RECEIVING MEANS 2604

FIG. 26

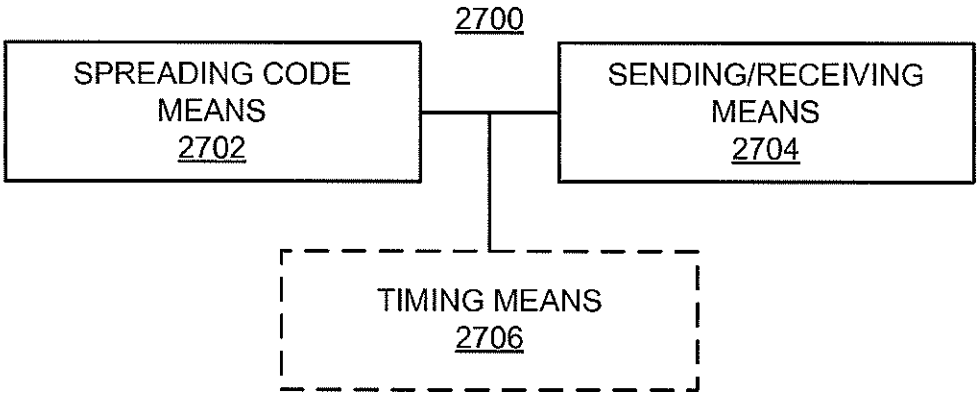


FIG. 27

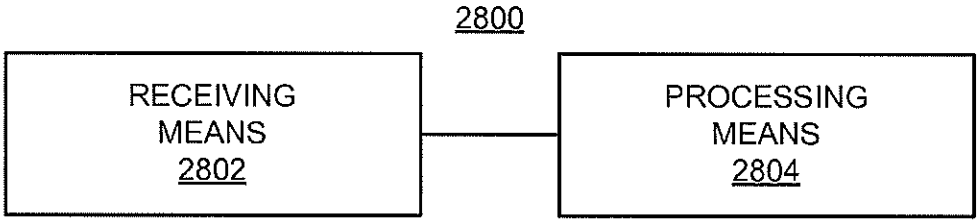


FIG. 28

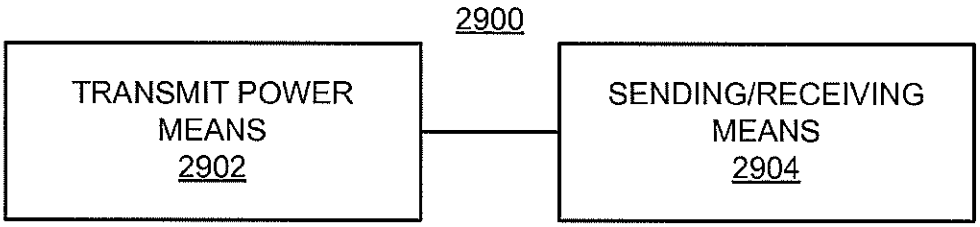


FIG. 29

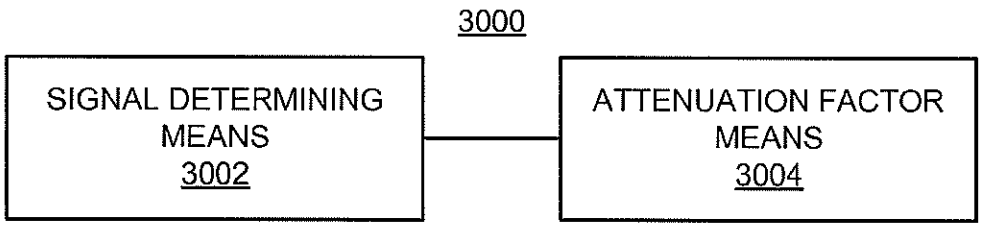

3000
SIGNAL DETERMINING MEANS
3002
ATTENUATION FACTOR MEANS
3004

FIG. 30