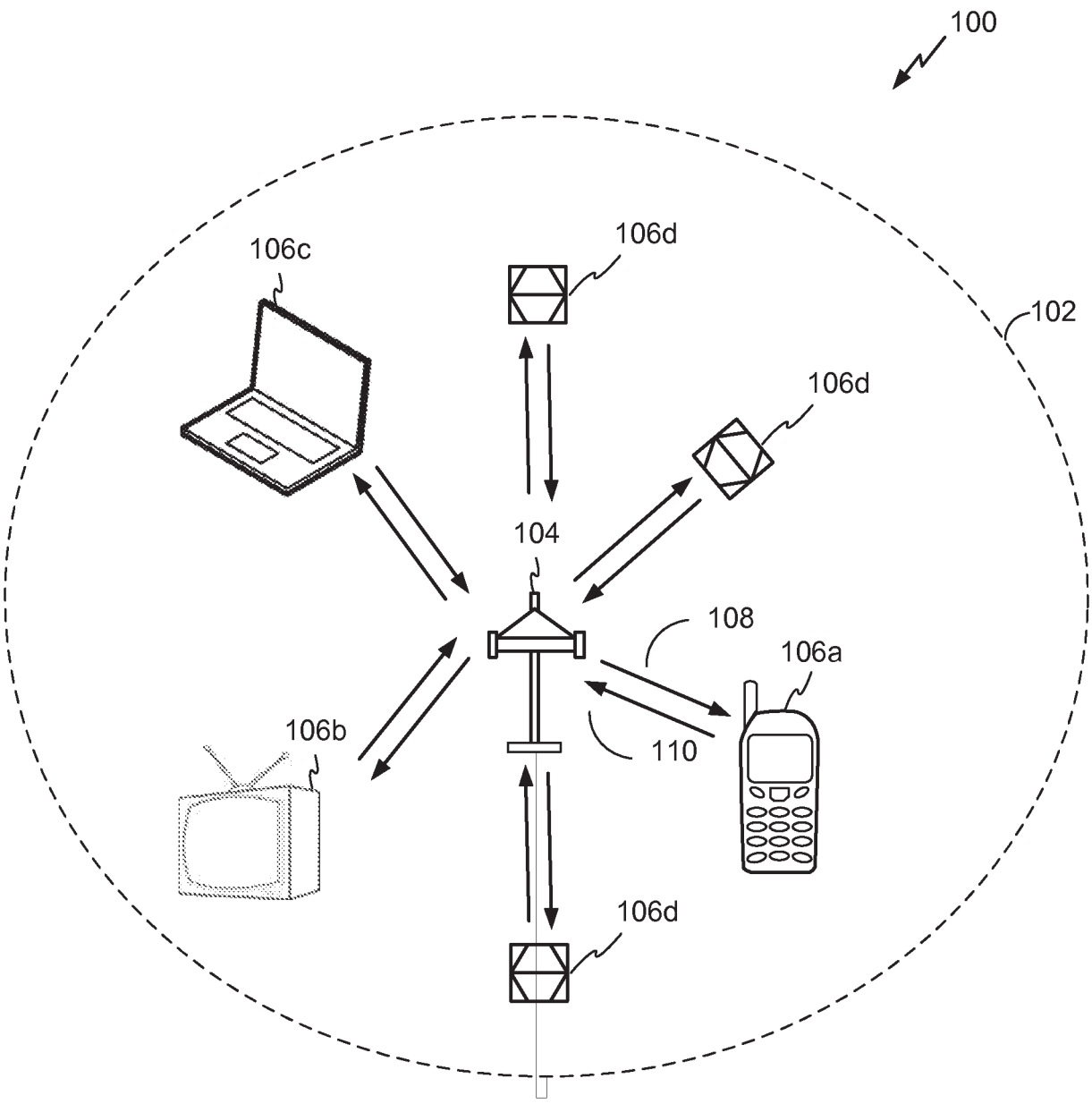


FIG. 1

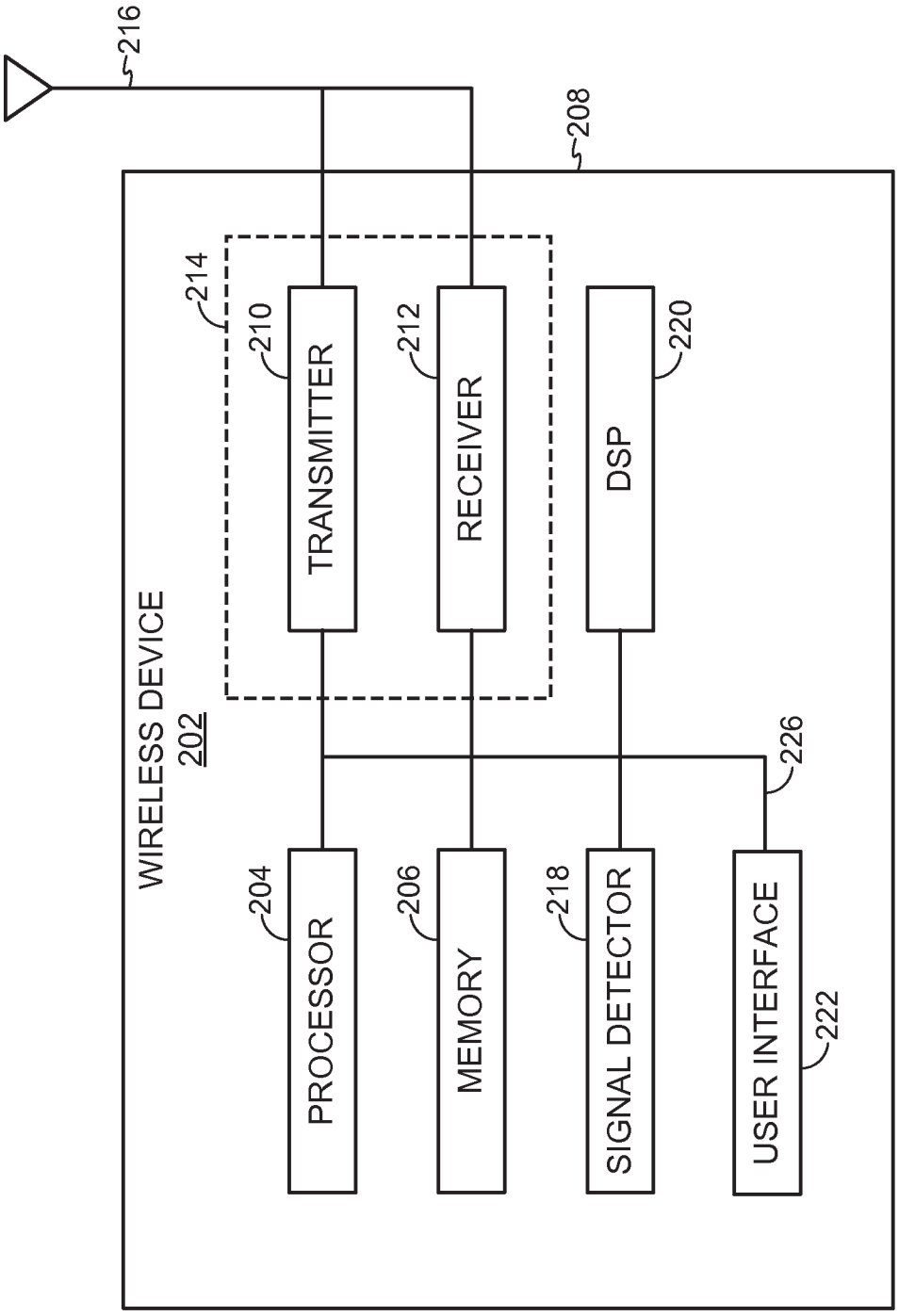

216
208
214
210
TRANSMITTER
212
RECEIVER
220
DSP
WIRELESS DEVICE
202
226
204
PROCESSOR
206
MEMORY
218
SIGNAL DETECTOR
USER INTERFACE
222

FIG. 2

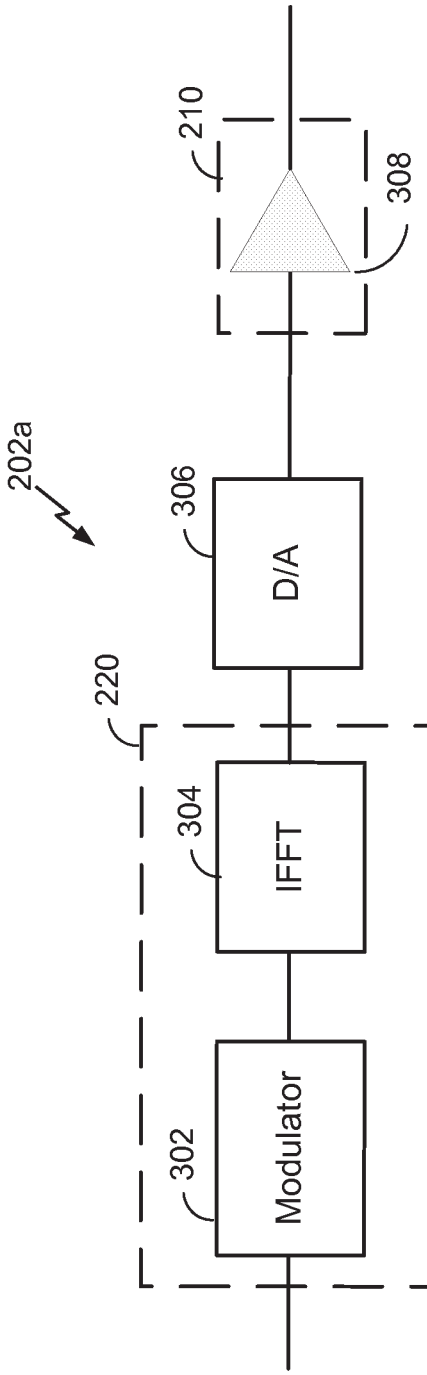

202a
210
308
306
D/A
220
304
IFFT
302
Modulator

FIG. 3

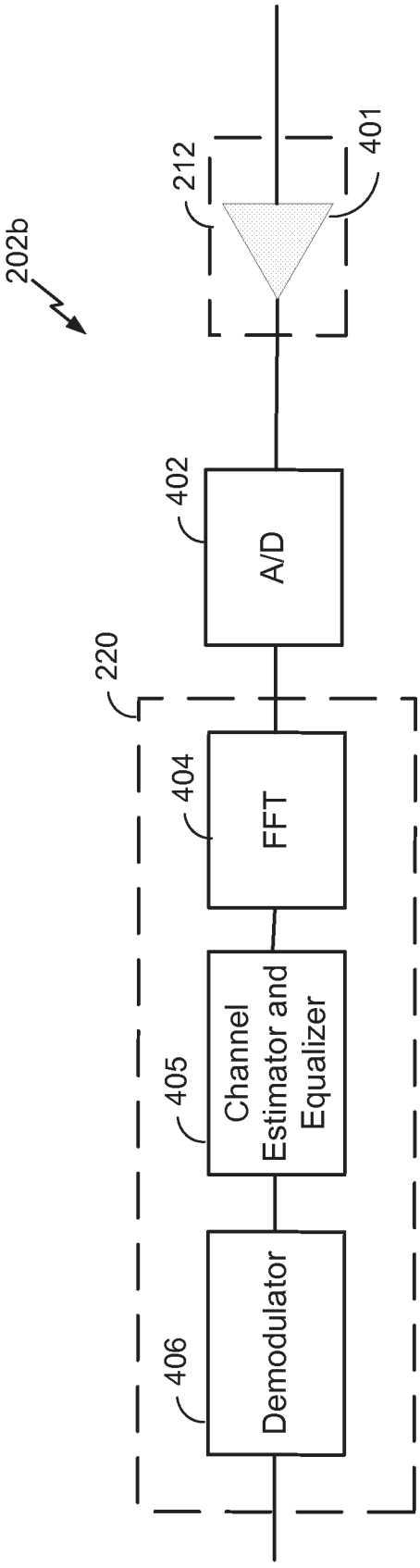

202b
212
401
402
A/D
220
404
FFT
405
Channel Estimator and Equalizer
406
Demodulator

FIG. 4

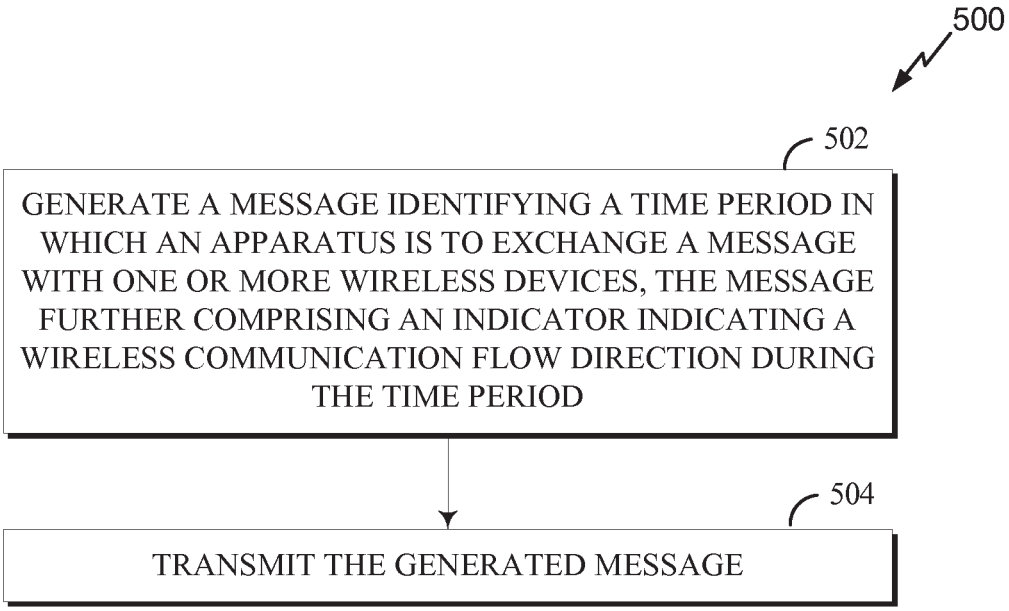

500
502
GENERATE A MESSAGE IDENTIFYING A TIME PERIOD IN WHICH AN APPARATUS IS TO EXCHANGE A MESSAGE WITH ONE OR MORE WIRELESS DEVICES, THE MESSAGE FURTHER COMPRISING AN INDICATOR INDICATING A WIRELESS COMMUNICATION FLOW DIRECTION DURING THE TIME PERIOD
504
TRANSMIT THE GENERATED MESSAGE

FIG. 5

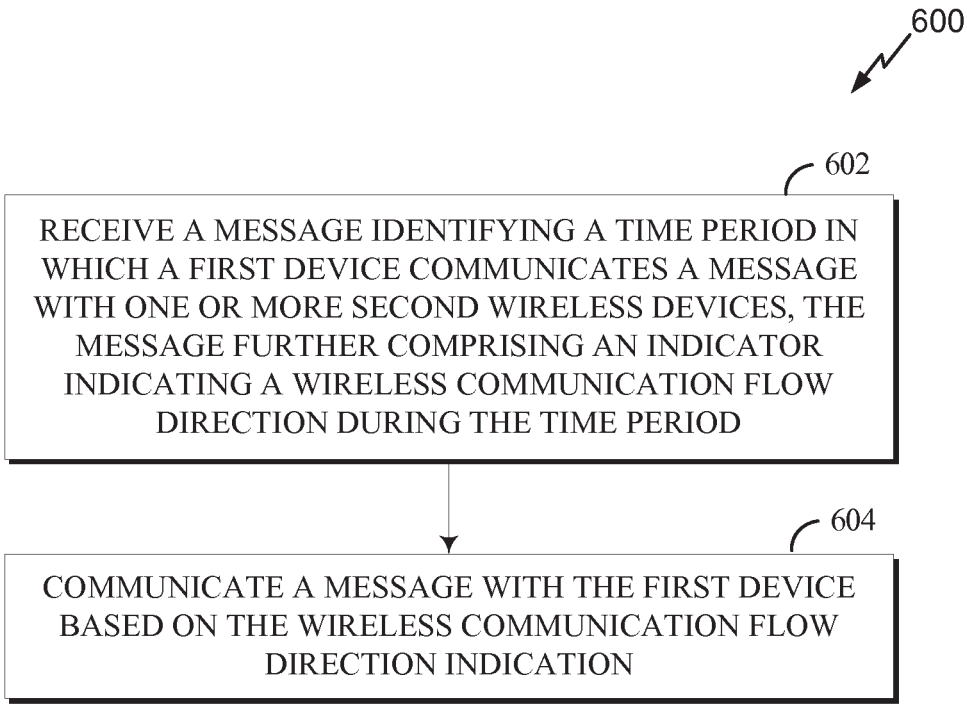

600
602
RECEIVE A MESSAGE IDENTIFYING A TIME PERIOD IN WHICH A FIRST DEVICE COMMUNICATES A MESSAGE WITH ONE OR MORE SECOND WIRELESS DEVICES, THE MESSAGE FURTHER COMPRISING AN INDICATOR INDICATING A WIRELESS COMMUNICATION FLOW DIRECTION DURING THE TIME PERIOD
604
COMMUNICATE A MESSAGE WITH THE FIRST DEVICE BASED ON THE WIRELESS COMMUNICATION FLOW DIRECTION INDICATION

FIG. 6

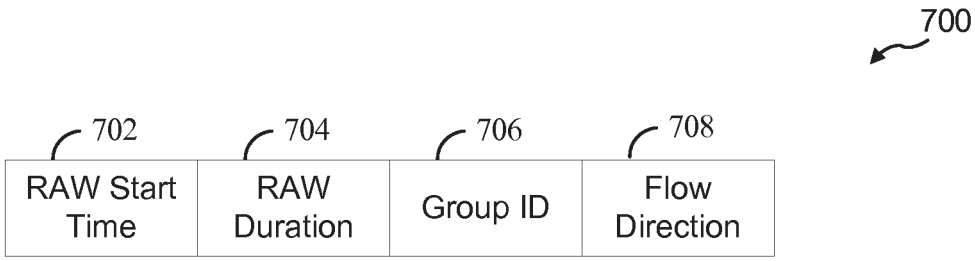

700
702
704
706
708
RAW Start Time
RAW Duration
Group ID
Flow Direction

FIG. 7

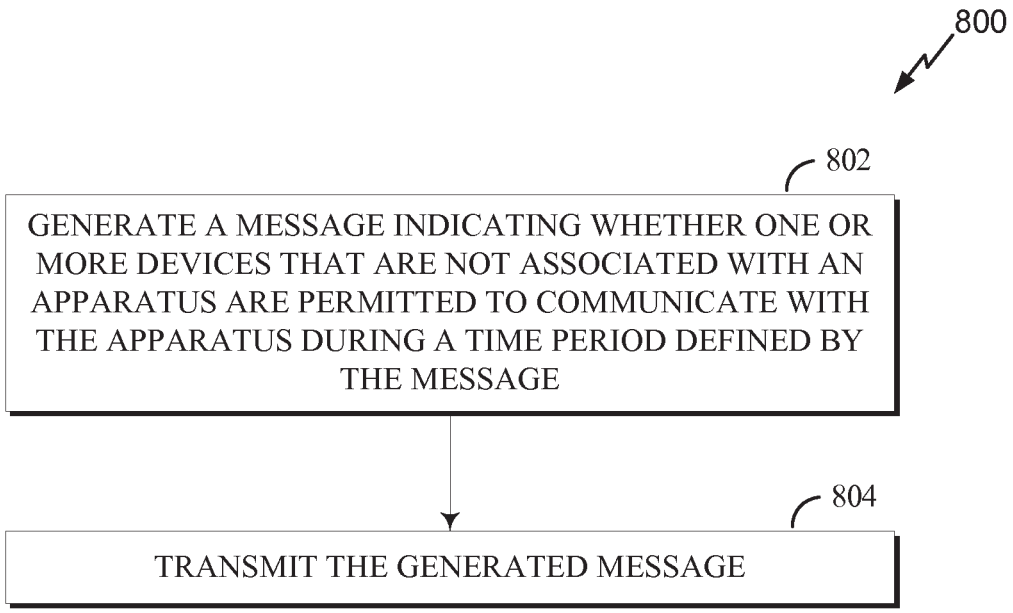

800
802
GENERATE A MESSAGE INDICATING WHETHER ONE OR MORE DEVICES THAT ARE NOT ASSOCIATED WITH AN APPARATUS ARE PERMITTED TO COMMUNICATE WITH THE APPARATUS DURING A TIME PERIOD DEFINED BY THE MESSAGE
804
TRANSMIT THE GENERATED MESSAGE

FIG. 8

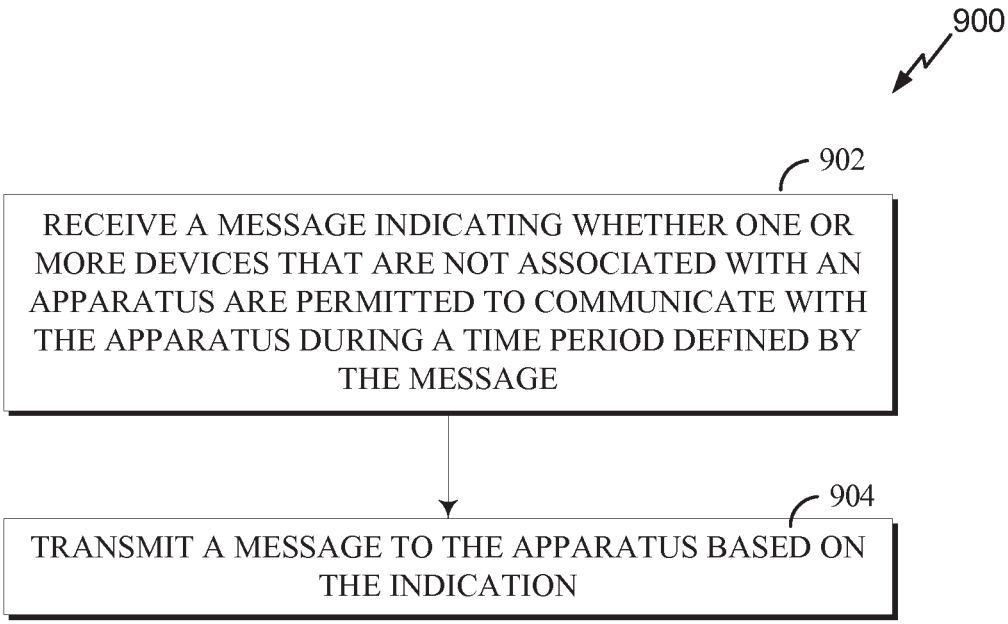

900
902
RECEIVE A MESSAGE INDICATING WHETHER ONE OR MORE DEVICES THAT ARE NOT ASSOCIATED WITH AN APPARATUS ARE PERMITTED TO COMMUNICATE WITH THE APPARATUS DURING A TIME PERIOD DEFINED BY THE MESSAGE
904
TRANSMIT A MESSAGE TO THE APPARATUS BASED ON THE INDICATION

FIG. 9

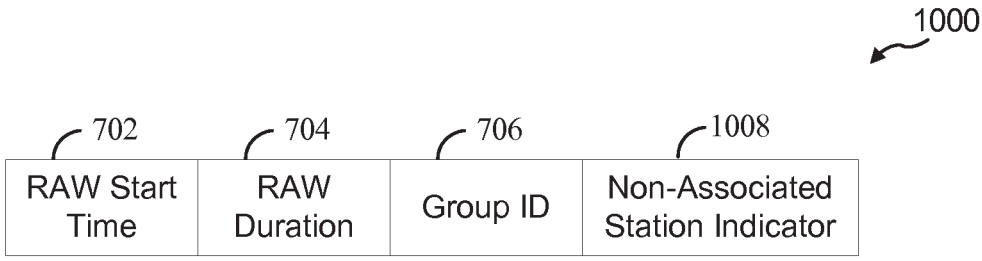

1000
702
704
706
1008
RAW Start Time
RAW Duration
Group ID
Non-Associated Station Indicator

FIG. 10

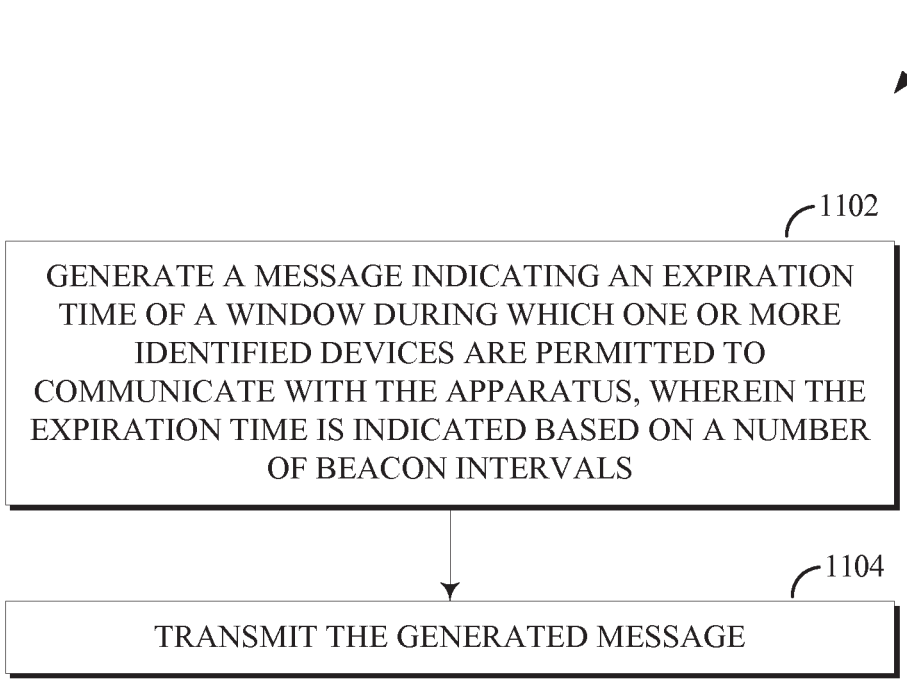

1100
1102
GENERATE A MESSAGE INDICATING AN EXPIRATION TIME OF A WINDOW DURING WHICH ONE OR MORE IDENTIFIED DEVICES ARE PERMITTED TO COMMUNICATE WITH THE APPARATUS, WHEREIN THE EXPIRATION TIME IS INDICATED BASED ON A NUMBER OF BEACON INTERVALS
1104
TRANSMIT THE GENERATED MESSAGE

FIG. 11

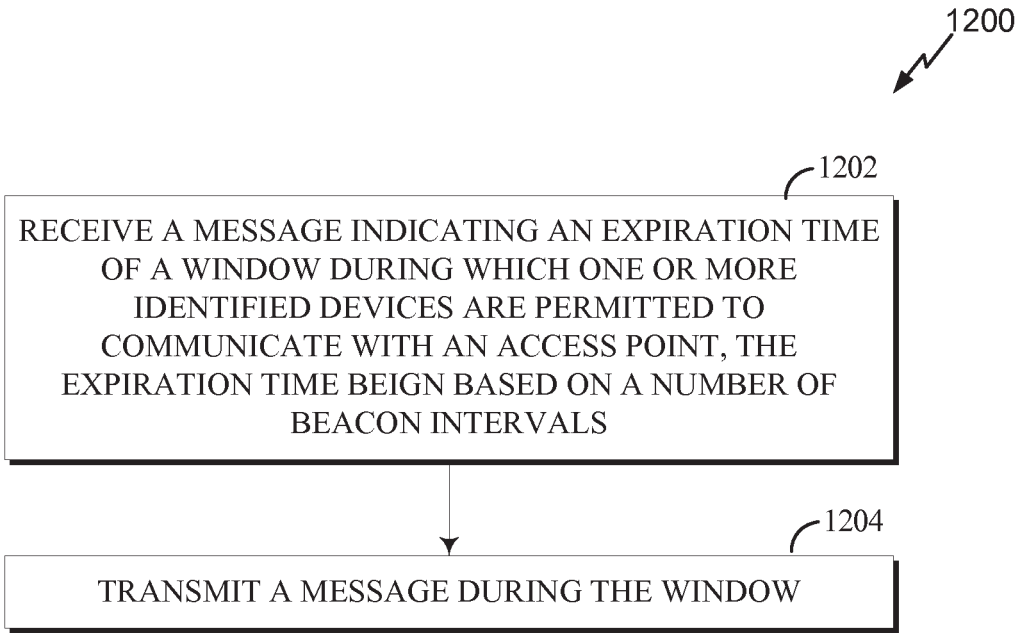

1200
1202
RECEIVE A MESSAGE INDICATING AN EXPIRATION TIME OF A WINDOW DURING WHICH ONE OR MORE IDENTIFIED DEVICES ARE PERMITTED TO COMMUNICATE WITH AN ACCESS POINT, THE EXPIRATION TIME BEIGN BASED ON A NUMBER OF BEACON INTERVALS
1204
TRANSMIT A MESSAGE DURING THE WINDOW

FIG. 12

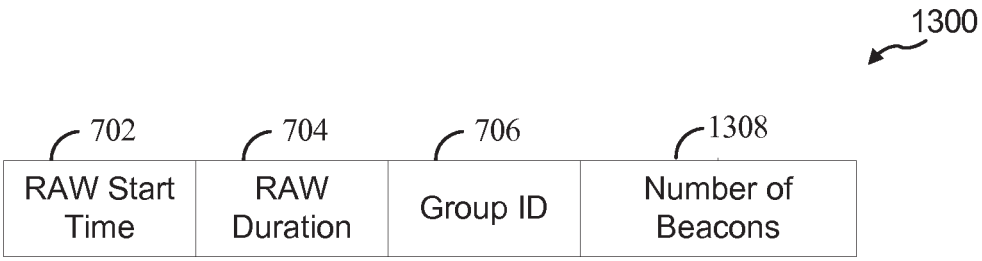

1300
702
704
706
1308
RAW Start Time
RAW Duration
Group ID
Number of Beacons

FIG. 13

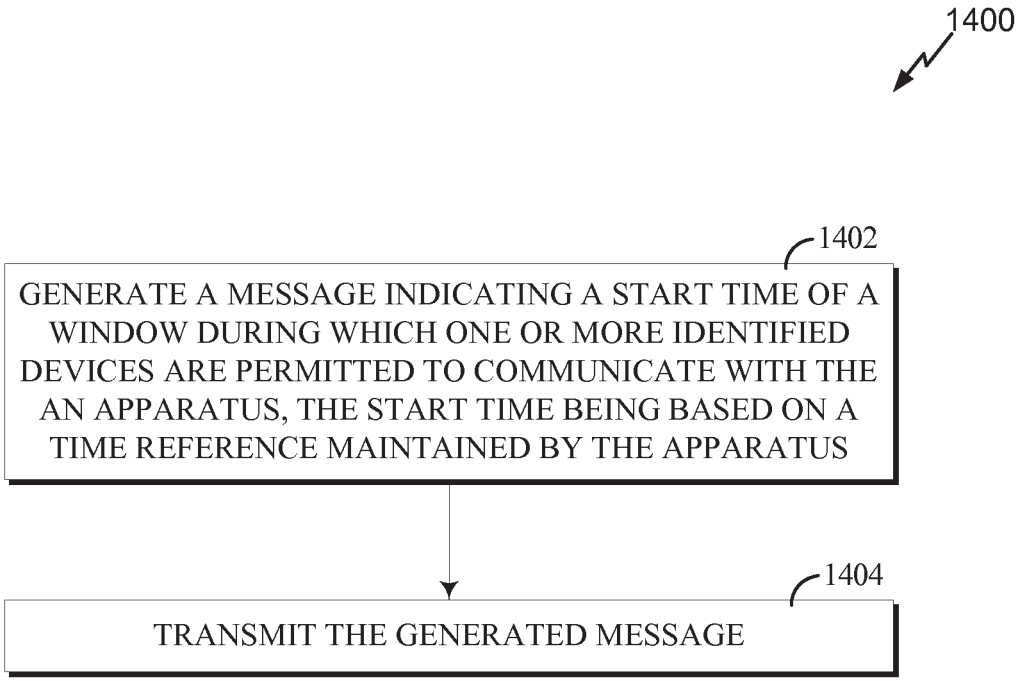

1400
1402
GENERATE A MESSAGE INDICATING A START TIME OF A WINDOW DURING WHICH ONE OR MORE IDENTIFIED DEVICES ARE PERMITTED TO COMMUNICATE WITH THE AN APPARATUS, THE START TIME BEING BASED ON A TIME REFERENCE MAINTAINED BY THE APPARATUS
1404
TRANSMIT THE GENERATED MESSAGE

FIG. 14

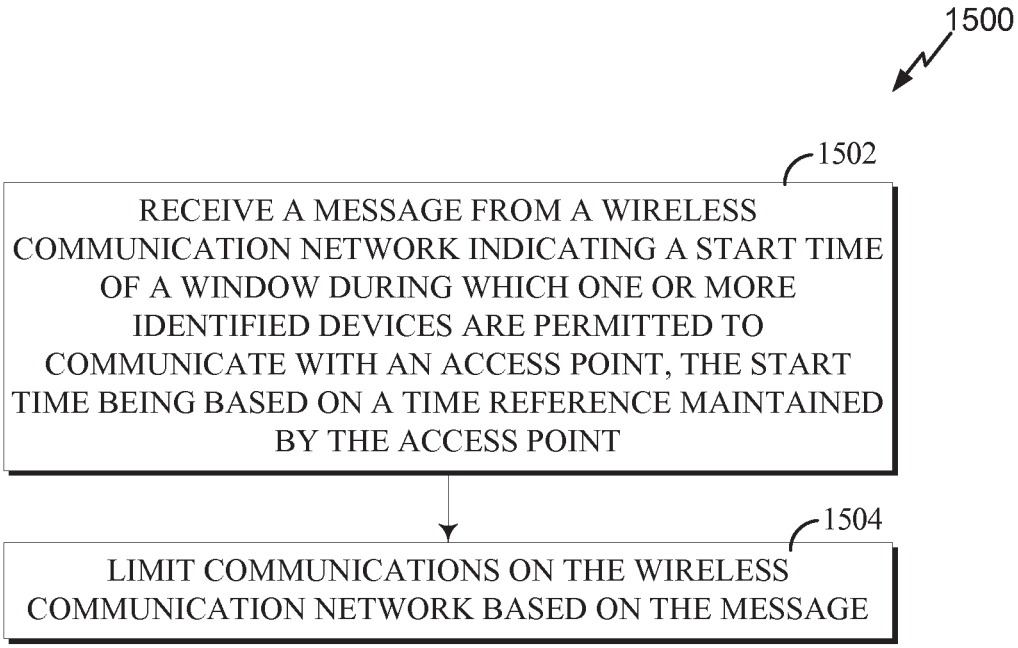

1500
1502
RECEIVE A MESSAGE FROM A WIRELESS COMMUNICATION NETWORK INDICATING A START TIME OF A WINDOW DURING WHICH ONE OR MORE IDENTIFIED DEVICES ARE PERMITTED TO COMMUNICATE WITH AN ACCESS POINT, THE START TIME BEING BASED ON A TIME REFERENCE MAINTAINED BY THE ACCESS POINT
1504
LIMIT COMMUNICATIONS ON THE WIRELESS COMMUNICATION NETWORK BASED ON THE MESSAGE

FIG. 15

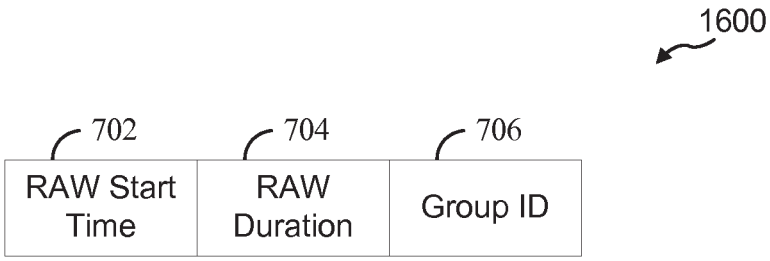


FIG. 16

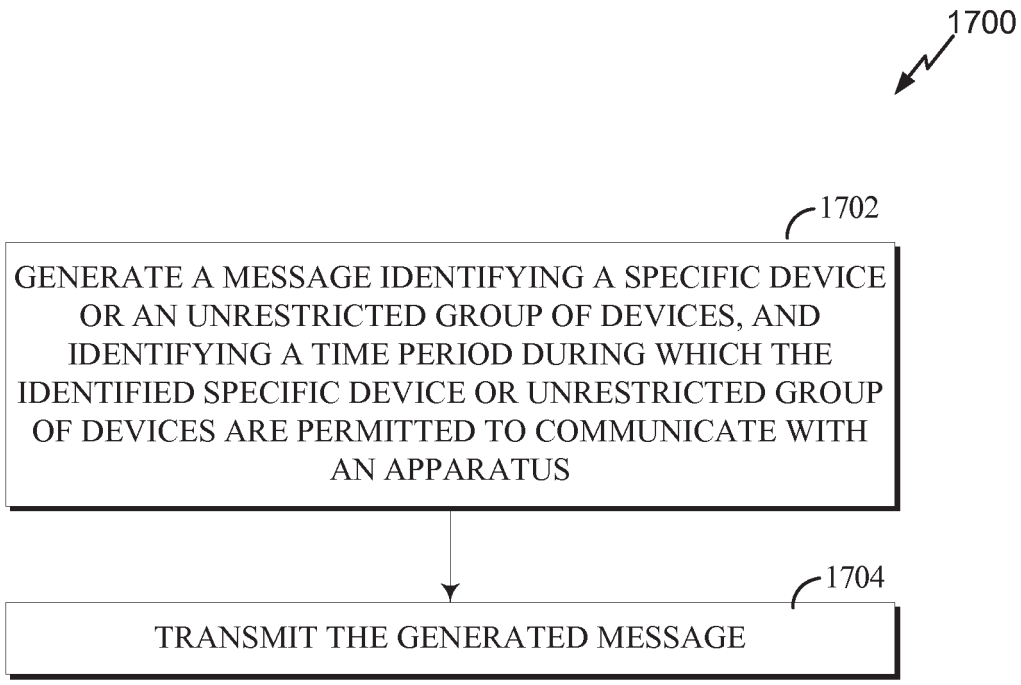

1700
1702
GENERATE A MESSAGE IDENTIFYING A SPECIFIC DEVICE OR AN UNRESTRICTED GROUP OF DEVICES, AND IDENTIFYING A TIME PERIOD DURING WHICH THE IDENTIFIED SPECIFIC DEVICE OR UNRESTRICTED GROUP OF DEVICES ARE PERMITTED TO COMMUNICATE WITH AN APPARATUS
1704
TRANSMIT THE GENERATED MESSAGE

FIG. 17

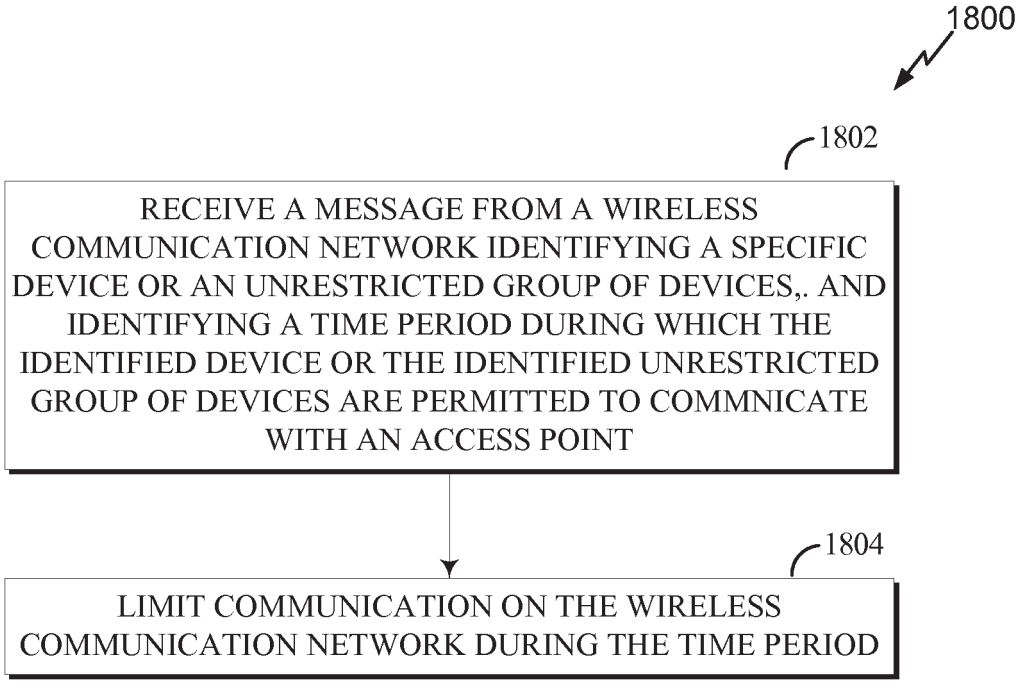

1800
1802
RECEIVE A MESSAGE FROM A WIRELESS COMMUNICATION NETWORK IDENTIFYING A SPECIFIC DEVICE OR AN UNRESTRICTED GROUP OF DEVICES,. AND IDENTIFYING A TIME PERIOD DURING WHICH THE IDENTIFIED DEVICE OR THE IDENTIFIED UNRESTRICTED GROUP OF DEVICES ARE PERMITTED TO COMMNICATE WITH AN ACCESS POINT
1804
LIMIT COMMUNICATION ON THE WIRELESS COMMUNICATION NETWORK DURING THE TIME PERIOD

FIG. 18

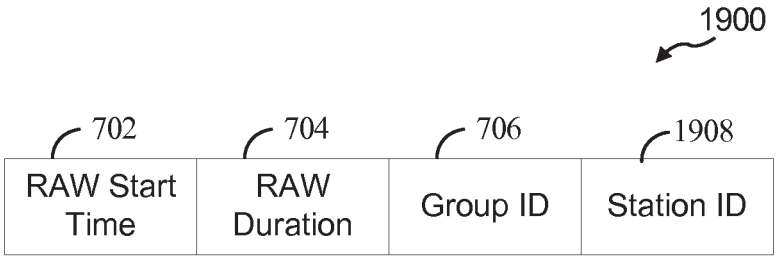

1900
702
704
706
1908
RAW Start Time
RAW Duration
Group ID
Station ID

FIG. 19

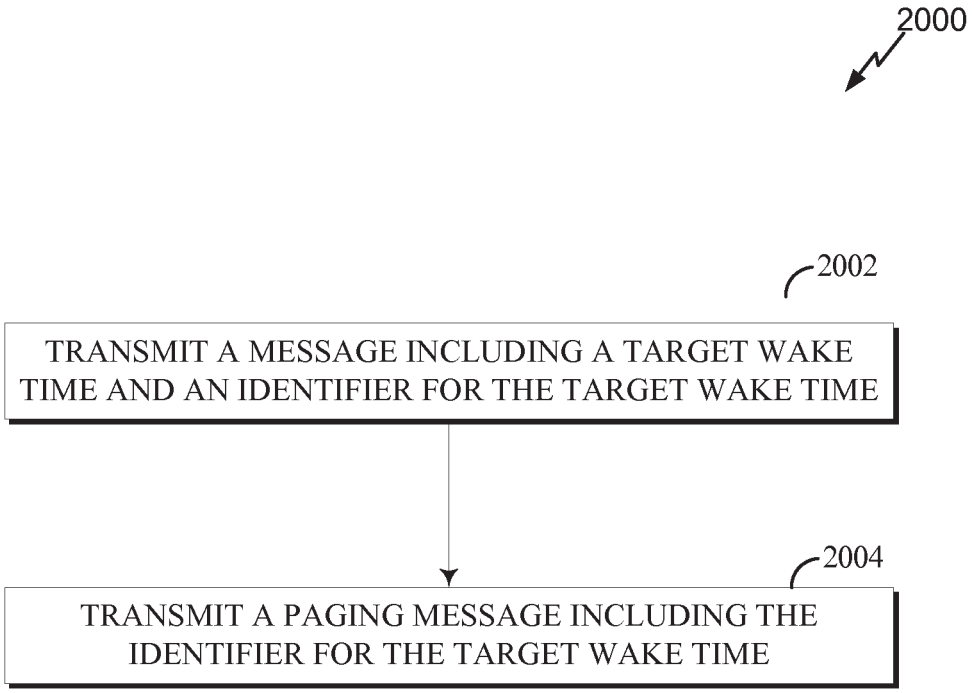

2000
2002
TRANSMIT A MESSAGE INCLUDING A TARGET WAKE TIME AND AN IDENTIFIER FOR THE TARGET WAKE TIME
2004
TRANSMIT A PAGING MESSAGE INCLUDING THE IDENTIFIER FOR THE TARGET WAKE TIME

FIG. 20

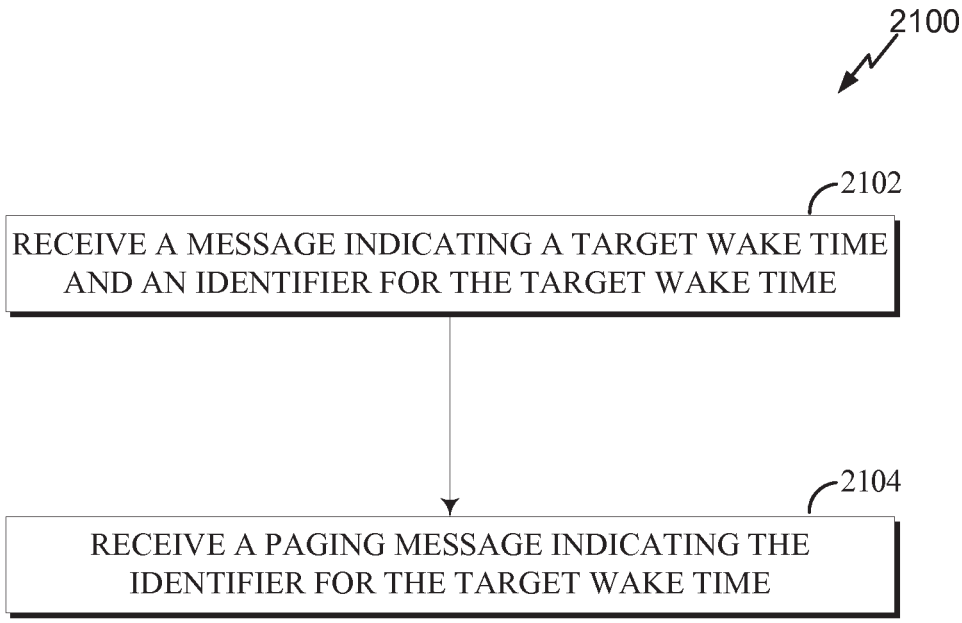

2100
2102
RECEIVE A MESSAGE INDICATING A TARGET WAKE TIME AND AN IDENTIFIER FOR THE TARGET WAKE TIME
2104
RECEIVE A PAGING MESSAGE INDICATING THE IDENTIFIER FOR THE TARGET WAKE TIME

FIG. 21

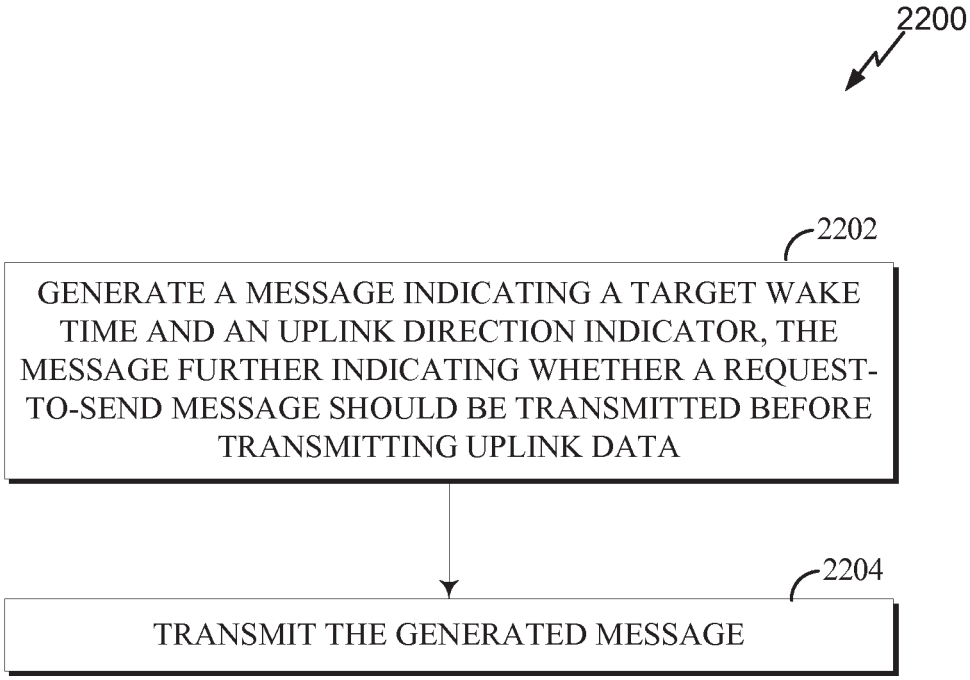

2200
2202
GENERATE A MESSAGE INDICATING A TARGET WAKE TIME AND AN UPLINK DIRECTION INDICATOR, THE MESSAGE FURTHER INDICATING WHETHER A REQUEST-TO-SEND MESSAGE SHOULD BE TRANSMITTED BEFORE TRANSMITTING UPLINK DATA
2204
TRANSMIT THE GENERATED MESSAGE

FIG. 22

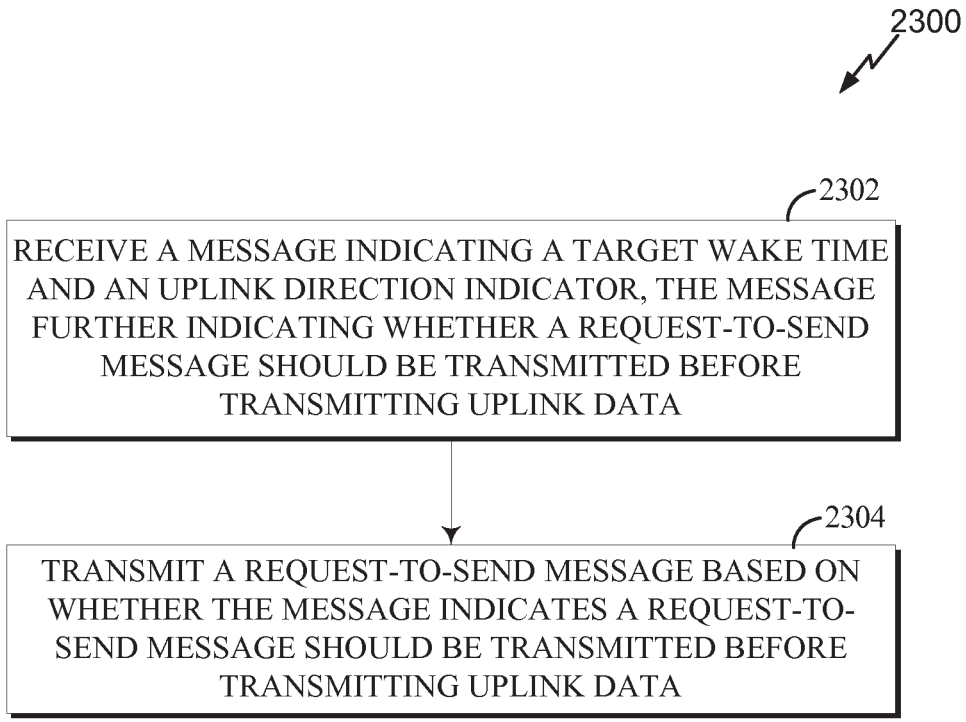

2300
2302
RECEIVE A MESSAGE INDICATING A TARGET WAKE TIME AND AN UPLINK DIRECTION INDICATOR, THE MESSAGE FURTHER INDICATING WHETHER A REQUEST-TO-SEND MESSAGE SHOULD BE TRANSMITTED BEFORE TRANSMITTING UPLINK DATA
2304
TRANSMIT A REQUEST-TO-SEND MESSAGE BASED ON WHETHER THE MESSAGE INDICATES A REQUEST-TO-SEND MESSAGE SHOULD BE TRANSMITTED BEFORE TRANSMITTING UPLINK DATA

FIG. 23