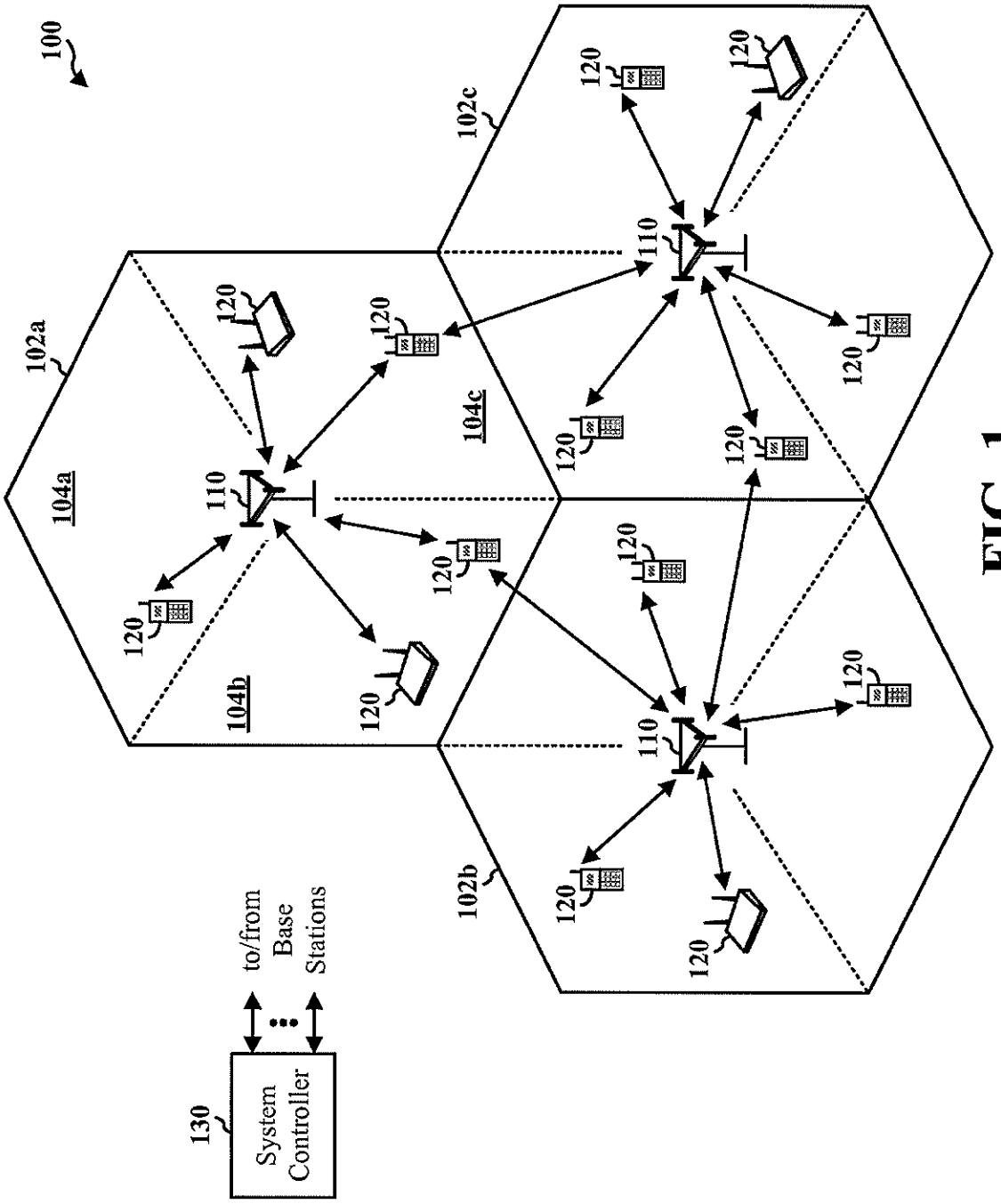

100
102a
102b
102c
104a
104b
104c
110
120
130
System Controller
to/from Base Stations

FIG. 1

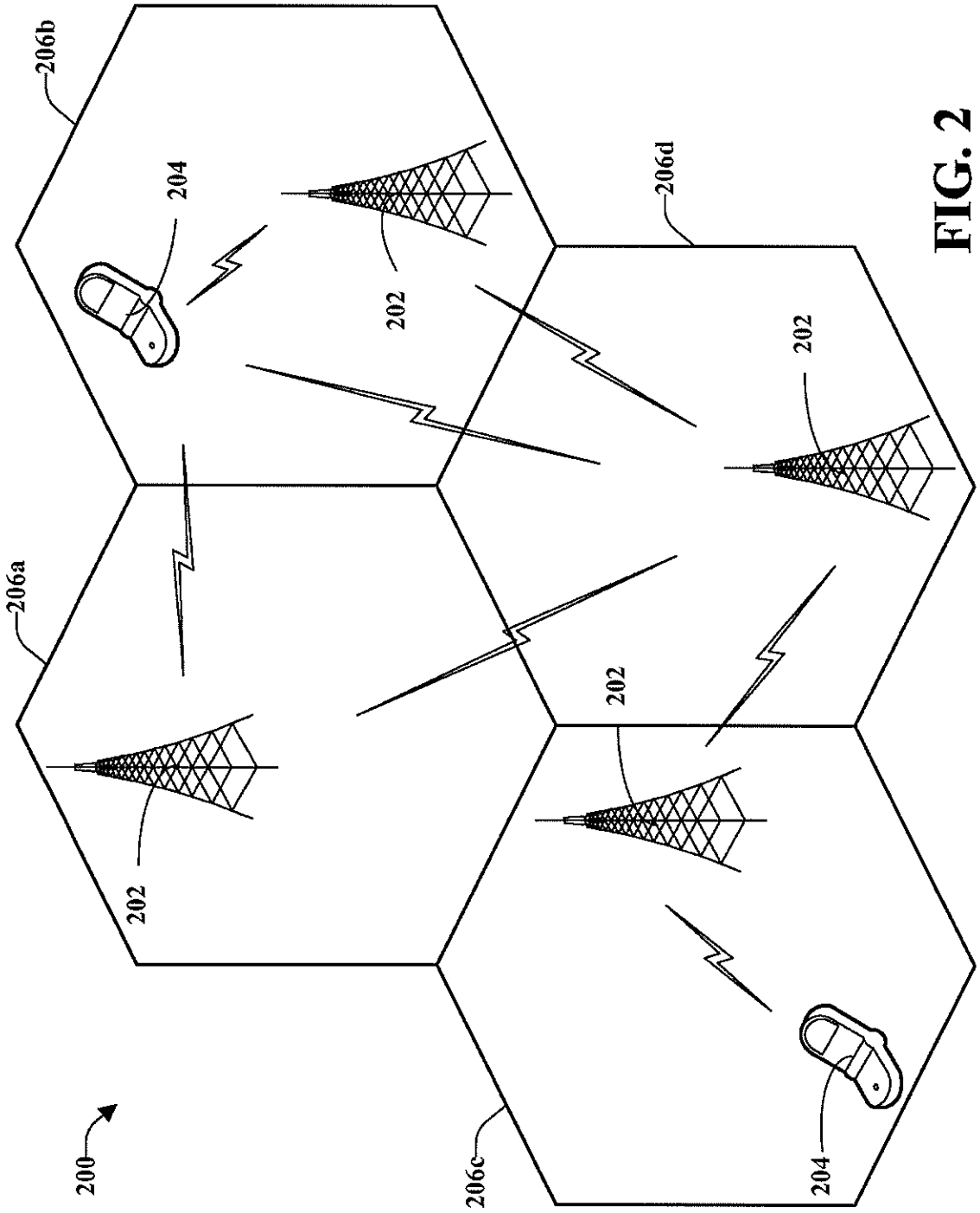


FIG. 2

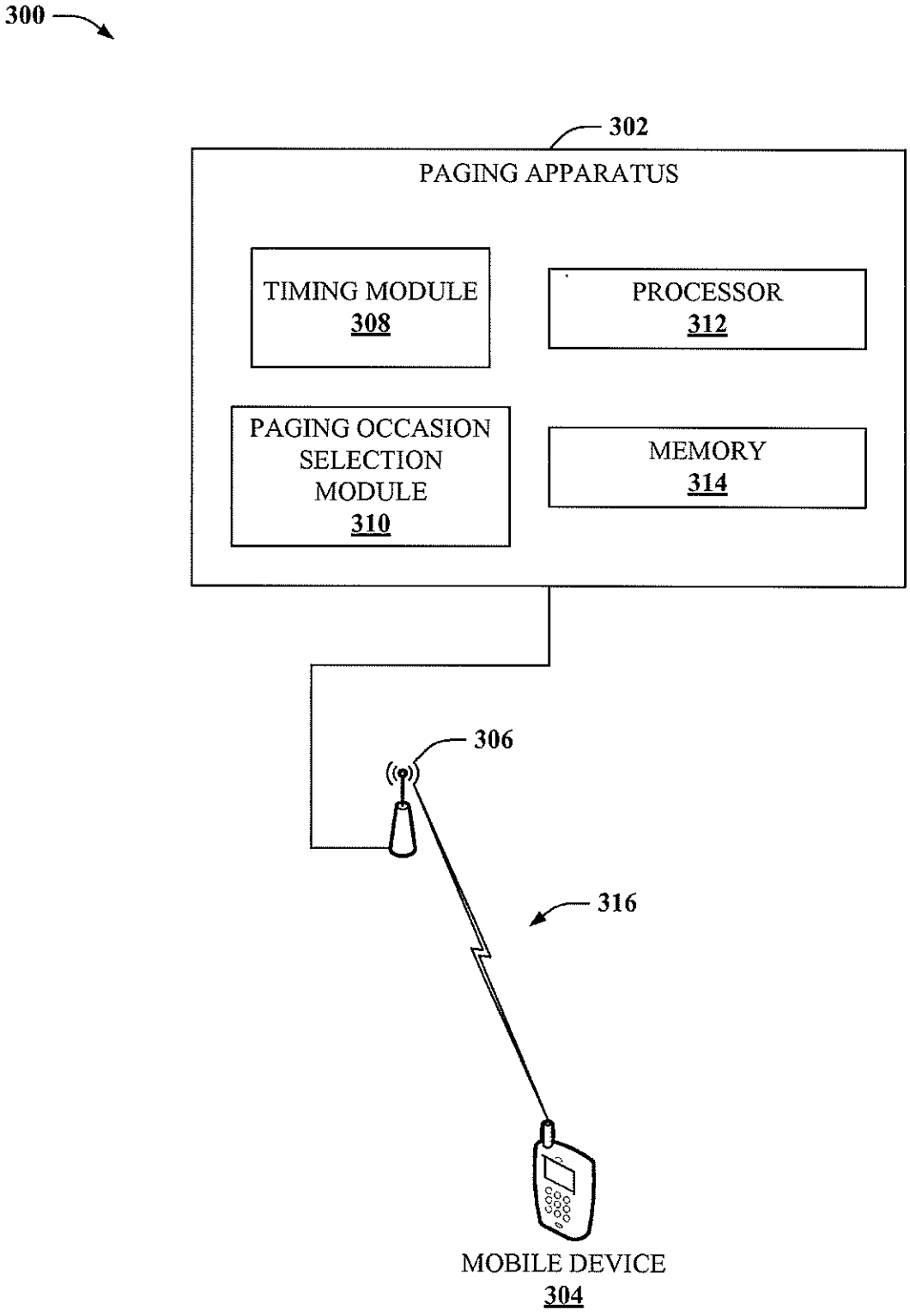

300
302
PAGING APPARATUS
TIMING MODULE
308
PROCESSOR
312
PAGING OCCASION SELECTION MODULE
310
MEMORY
314
306
316
MOBILE DEVICE
304

FIG. 3

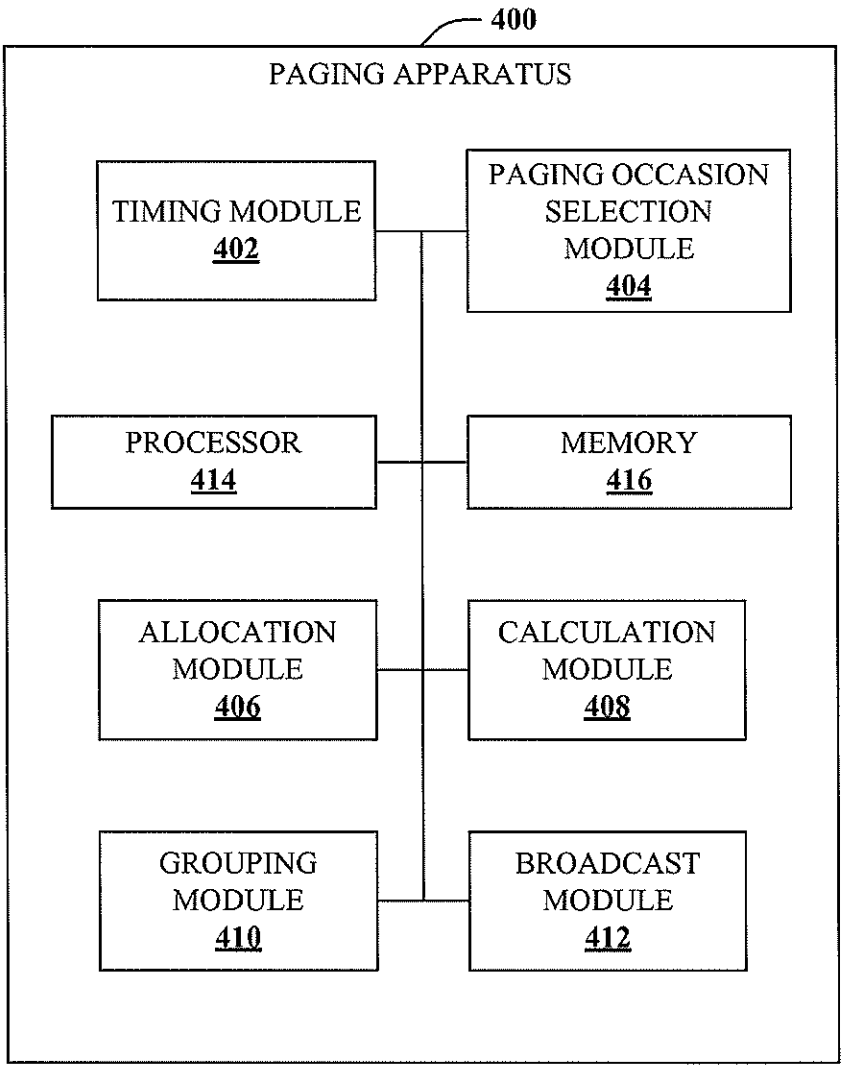

400
PAGING APPARATUS
TIMING MODULE
402
PAGING OCCASION SELECTION MODULE
404
PROCESSOR
414
MEMORY
416
ALLOCATION MODULE
406
CALCULATION MODULE
408
GROUPING MODULE
410
BROADCAST MODULE
412

FIG. 4

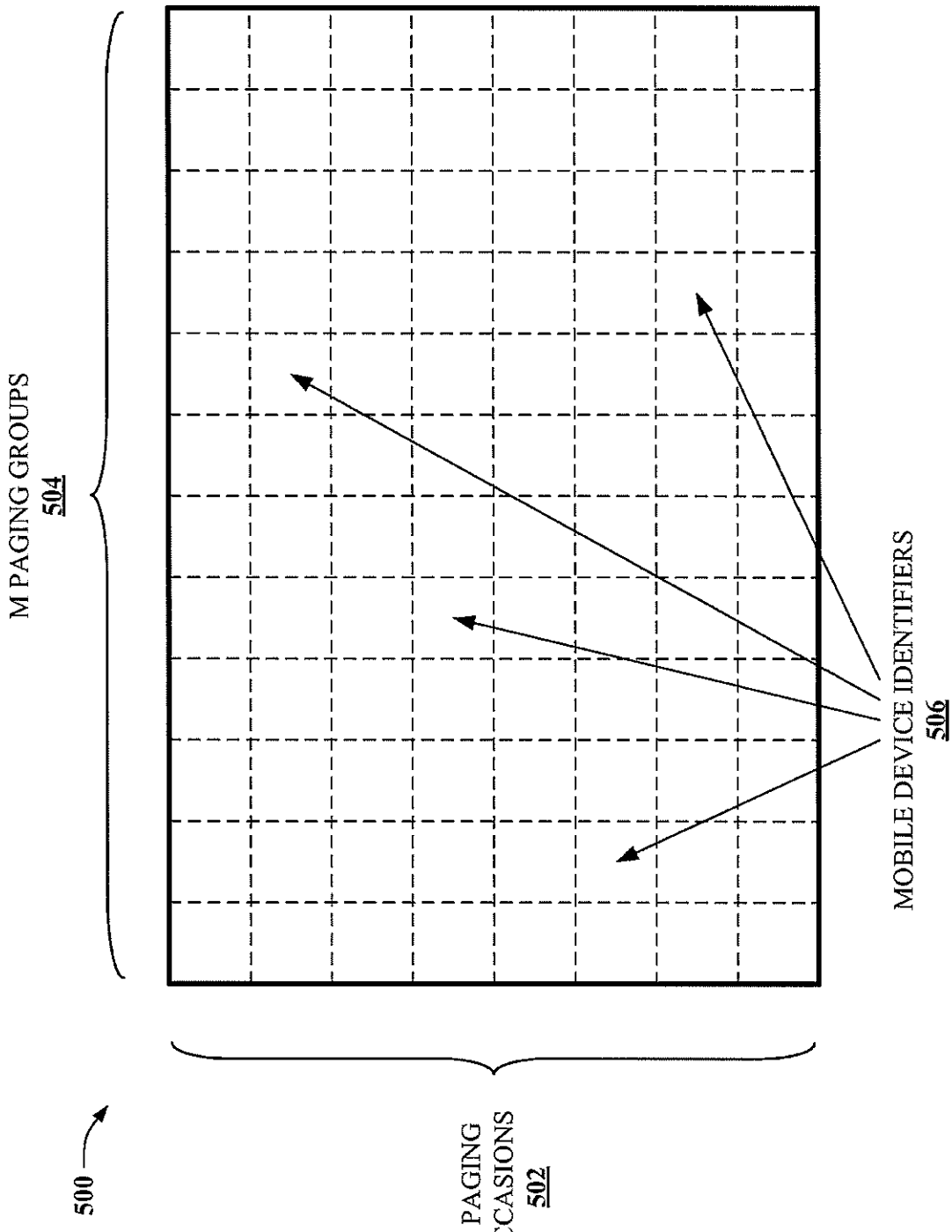
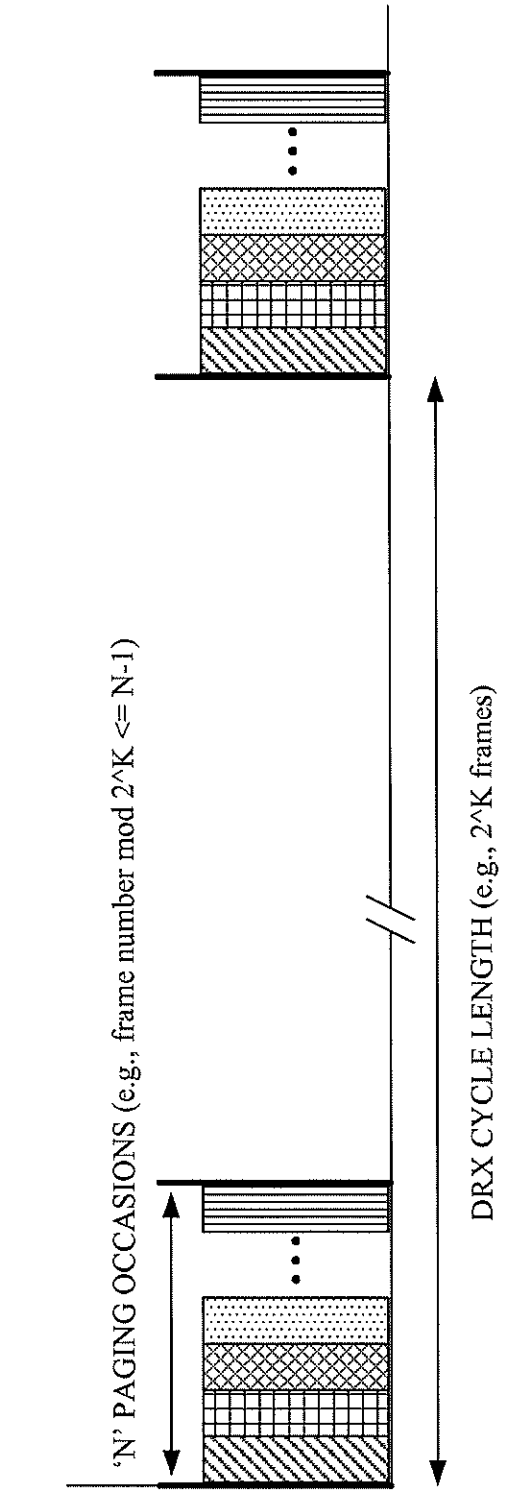

M PAGING GROUPS
504
N PAGING OCCASIONS
502
MOBILE DEVICE IDENTIFIERS
506
500

FIG. 5


600A
'N' PAGING OCCASIONS (e.g., frame number mod 2^K <= N-1)
DRX CYCLE LENGTH (e.g., 2^K frames)

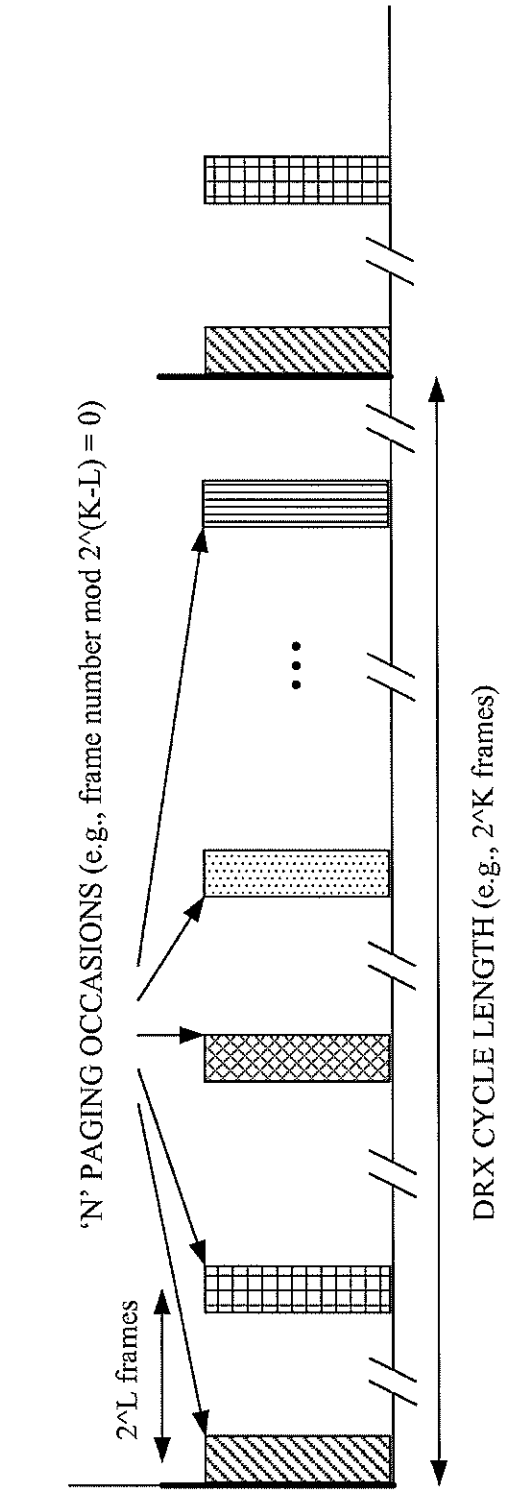

600B
'N' PAGING OCCASIONS (e.g., frame number mod 2^(K-L) = 0)
2^L frames
DRX CYCLE LENGTH (e.g., 2^K frames)

FIG. 6

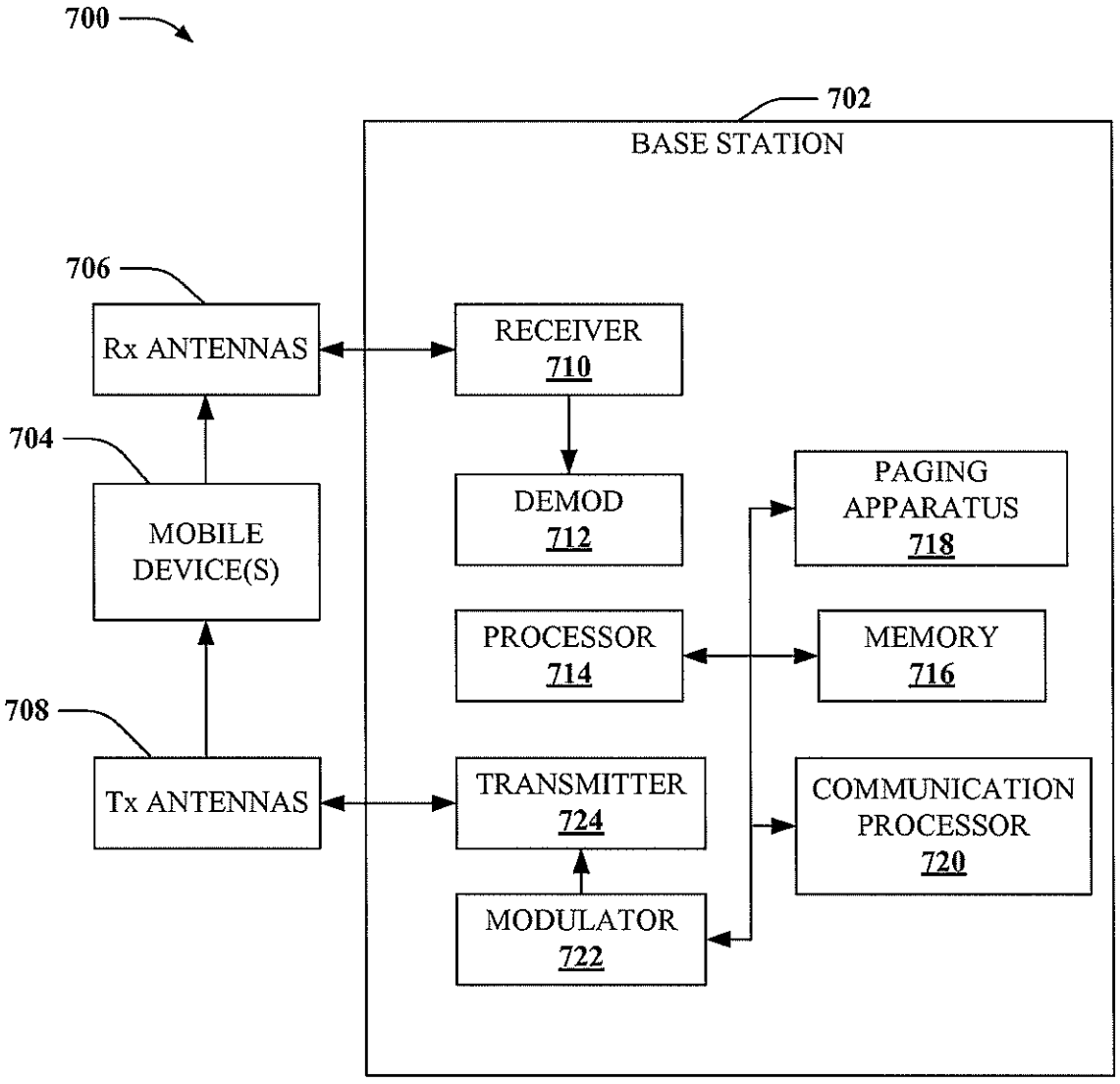

700
702
BASE STATION
706
Rx ANTENNAS
RECEIVER
710
704
MOBILE
DEVICE(S)
DEMOD
712
PAGING
APPARATUS
718
PROCESSOR
714
MEMORY
716
708
Tx ANTENNAS
TRANSMITTER
724
COMMUNICATION
PROCESSOR
720
MODULATOR
722

FIG. 7

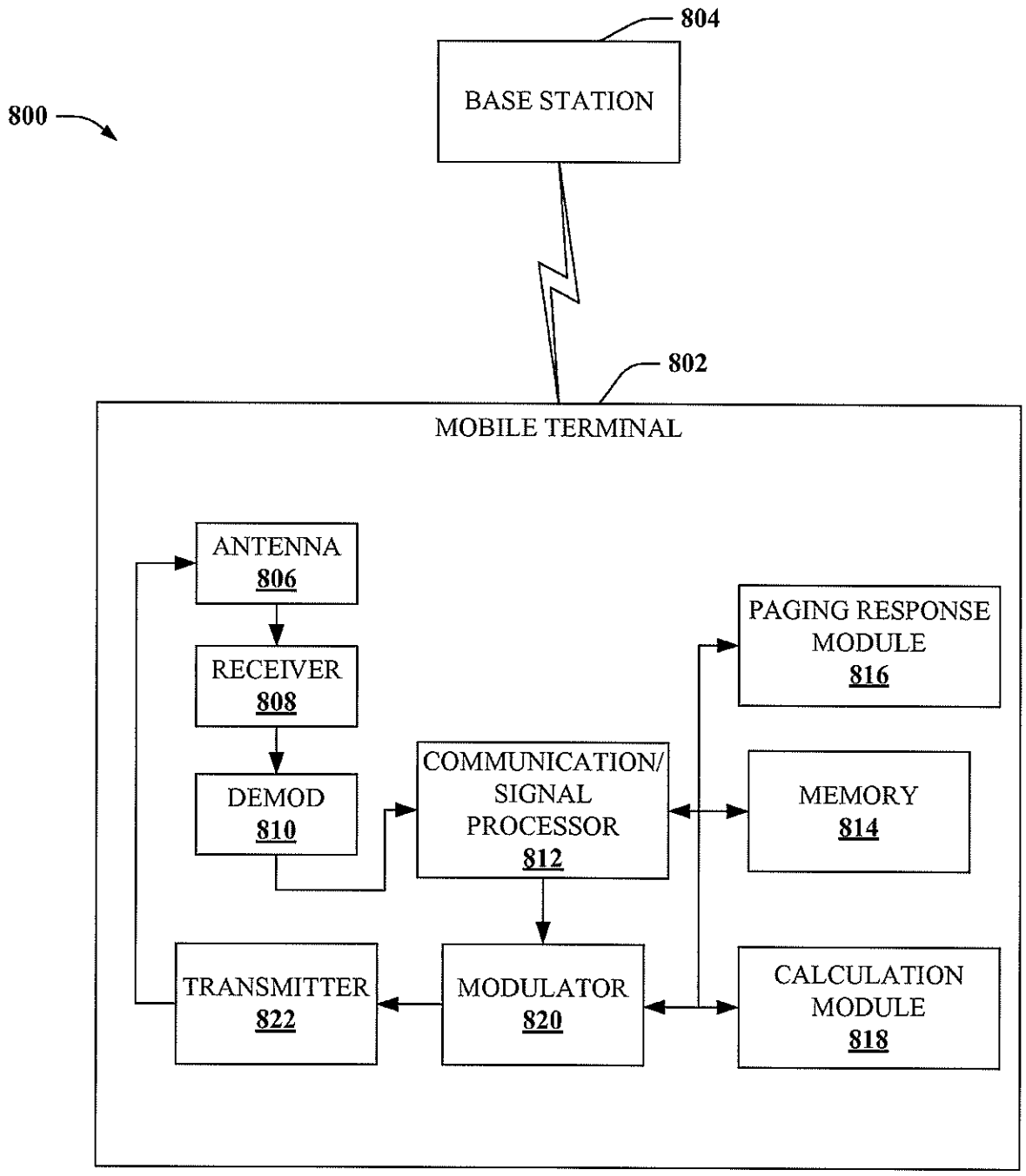

800
804
BASE STATION
802
MOBILE TERMINAL
ANTENNA
806
RECEIVER
808
DEMOD
810
COMMUNICATION/
SIGNAL
PROCESSOR
812
PAGING RESPONSE
MODULE
816
MEMORY
814
TRANSMITTER
822
MODULATOR
820
CALCULATION
MODULE
818

FIG. 8

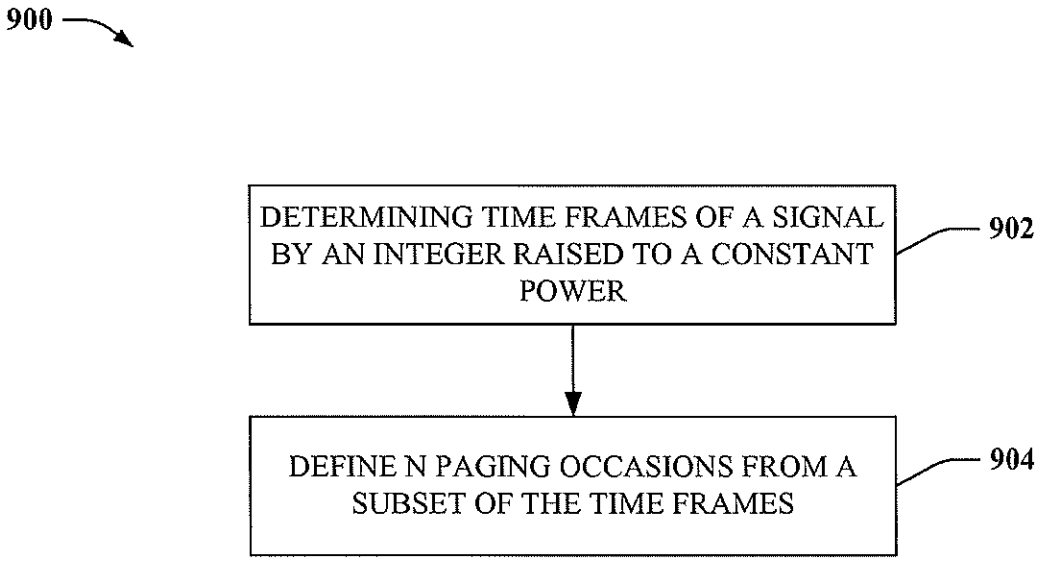

900
DETERMINING TIME FRAMES OF A SIGNAL BY AN INTEGER RAISED TO A CONSTANT POWER
902
DEFINE N PAGING OCCASIONS FROM A SUBSET OF THE TIME FRAMES
904

FIG. 9

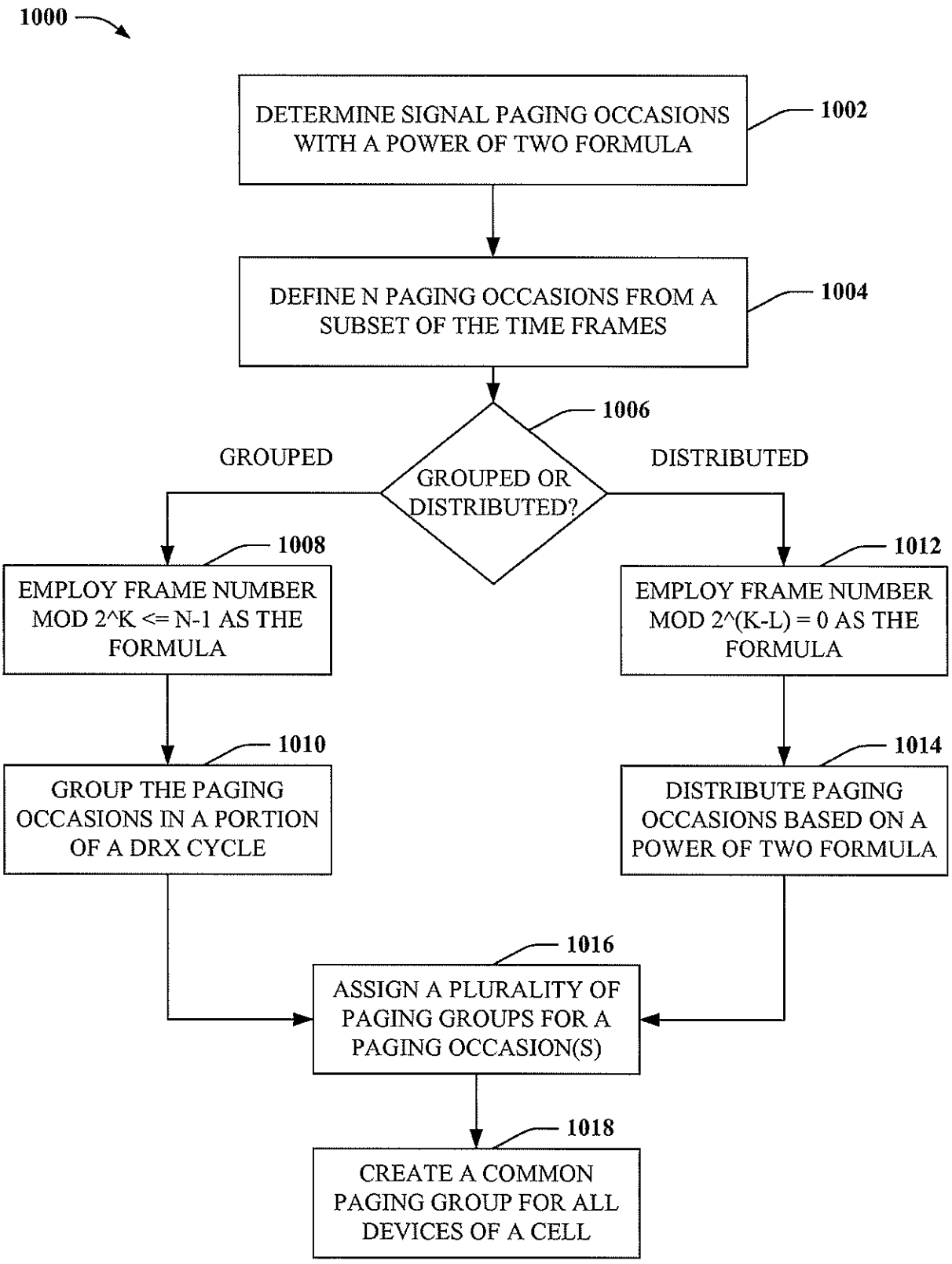

1000
DETERMINE SIGNAL PAGING OCCASIONS WITH A POWER OF TWO FORMULA
1002
DEFINE N PAGING OCCASIONS FROM A SUBSET OF THE TIME FRAMES
1004
1006
GROUPED OR DISTRIBUTED?
GROUPED
DISTRIBUTED
1008
EMPLOY FRAME NUMBER MOD 2^K <= N-1 AS THE FORMULA
1012
EMPLOY FRAME NUMBER MOD 2^(K-L) = 0 AS THE FORMULA
1010
GROUP THE PAGING OCCASIONS IN A PORTION OF A DRX CYCLE
1014
DISTRIBUTE PAGING OCCASIONS BASED ON A POWER OF TWO FORMULA
1016
ASSIGN A PLURALITY OF PAGING GROUPS FOR A PAGING OCCASION(S)
1018
CREATE A COMMON PAGING GROUP FOR ALL DEVICES OF A CELL

FIG. 10

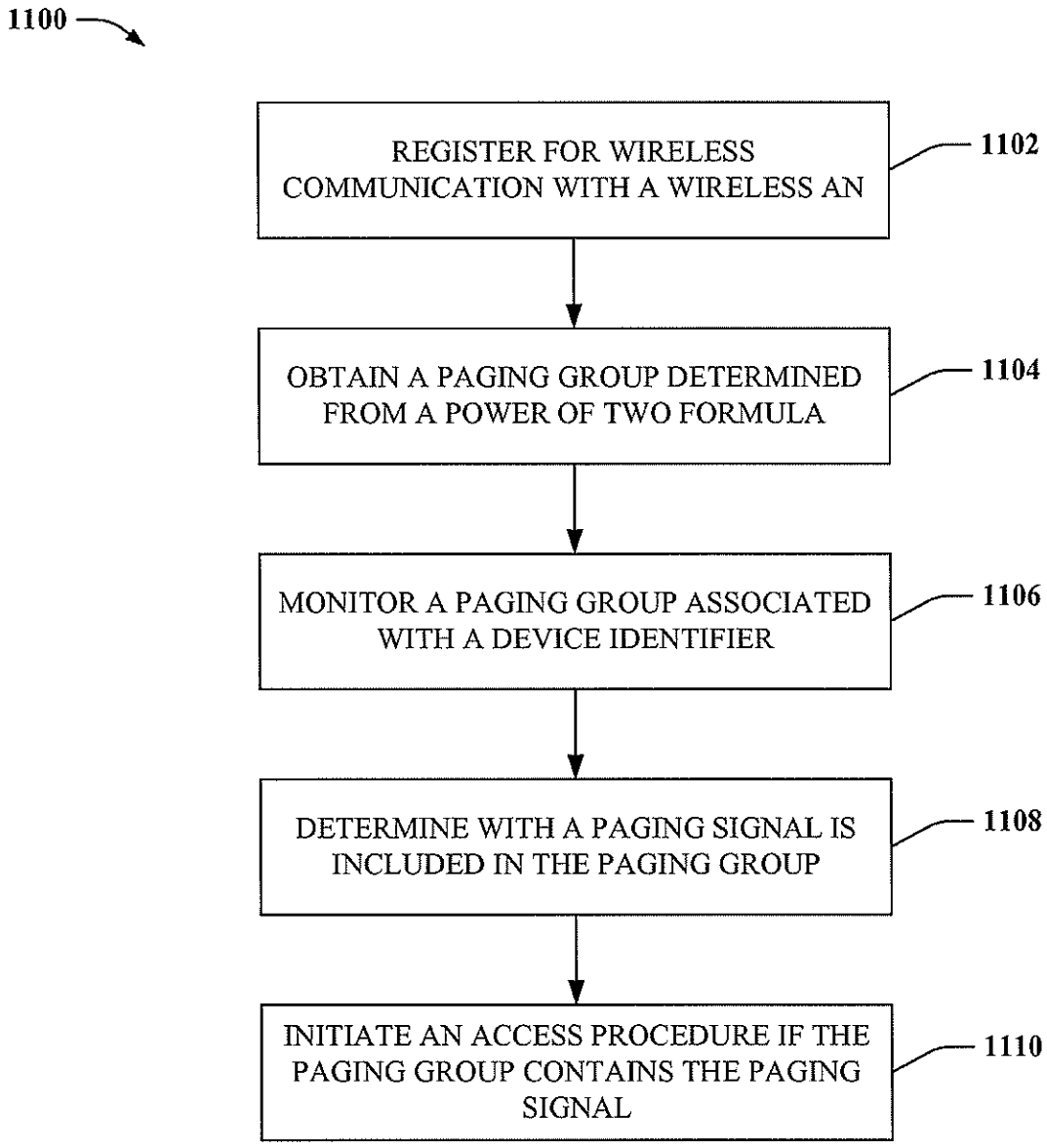

1100
REGISTER FOR WIRELESS COMMUNICATION WITH A WIRELESS AN
1102
OBTAIN A PAGING GROUP DETERMINED FROM A POWER OF TWO FORMULA
1104
MONITOR A PAGING GROUP ASSOCIATED WITH A DEVICE IDENTIFIER
1106
DETERMINE WITH A PAGING SIGNAL IS INCLUDED IN THE PAGING GROUP
1108
INITIATE AN ACCESS PROCEDURE IF THE PAGING GROUP CONTAINS THE PAGING SIGNAL
1110

FIG. 11

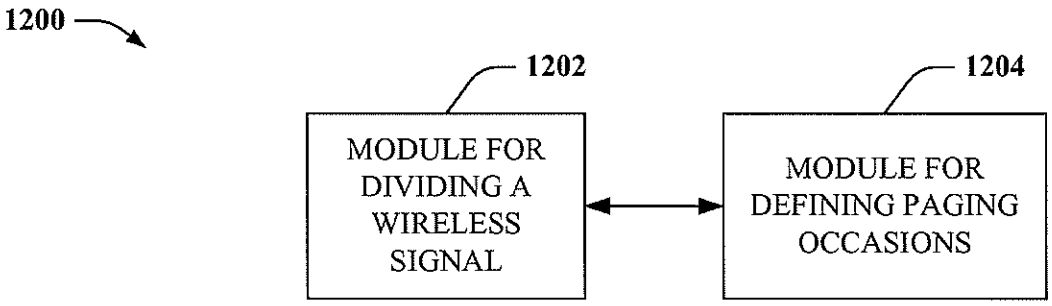

1200
1202
1204
MODULE FOR DIVIDING A WIRELESS SIGNAL
MODULE FOR DEFINING PAGING OCCASIONS

FIG. 12

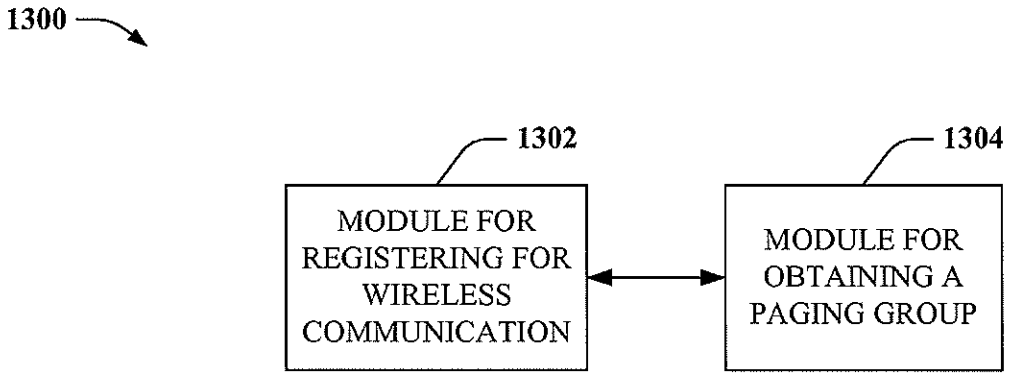

1300
1302
1304
MODULE FOR REGISTERING FOR WIRELESS COMMUNICATION
MODULE FOR OBTAINING A PAGING GROUP

FIG. 13