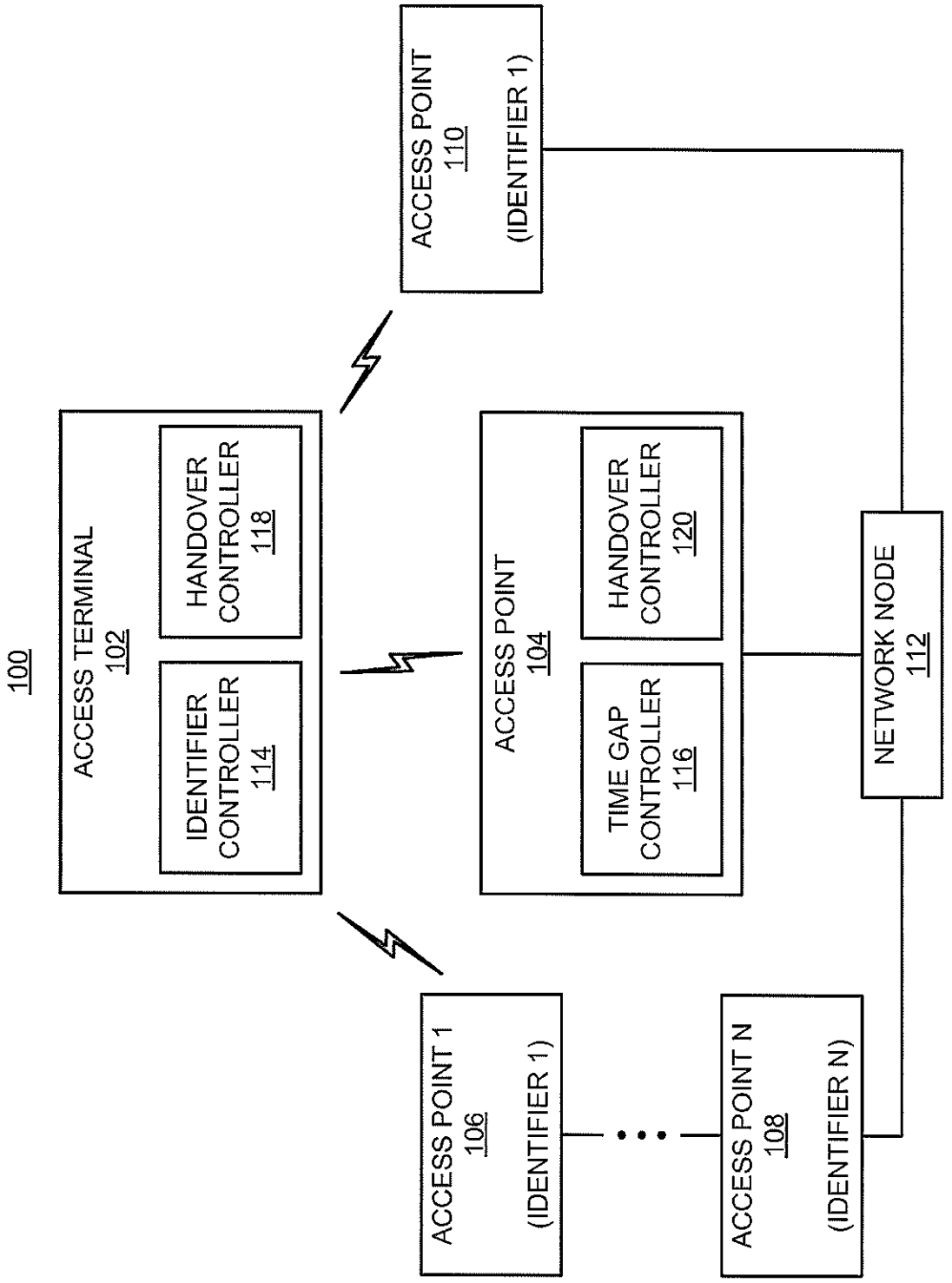

100
ACCESS TERMINAL
102
IDENTIFIER CONTROLLER
114
HANDOVER CONTROLLER
118
ACCESS POINT
104
TIME GAP CONTROLLER
116
HANDOVER CONTROLLER
120
ACCESS POINT
110
(IDENTIFIER 1)
NETWORK NODE
112
ACCESS POINT 1
106
(IDENTIFIER 1)
ACCESS POINT N
108
(IDENTIFIER N)

FIG. 1

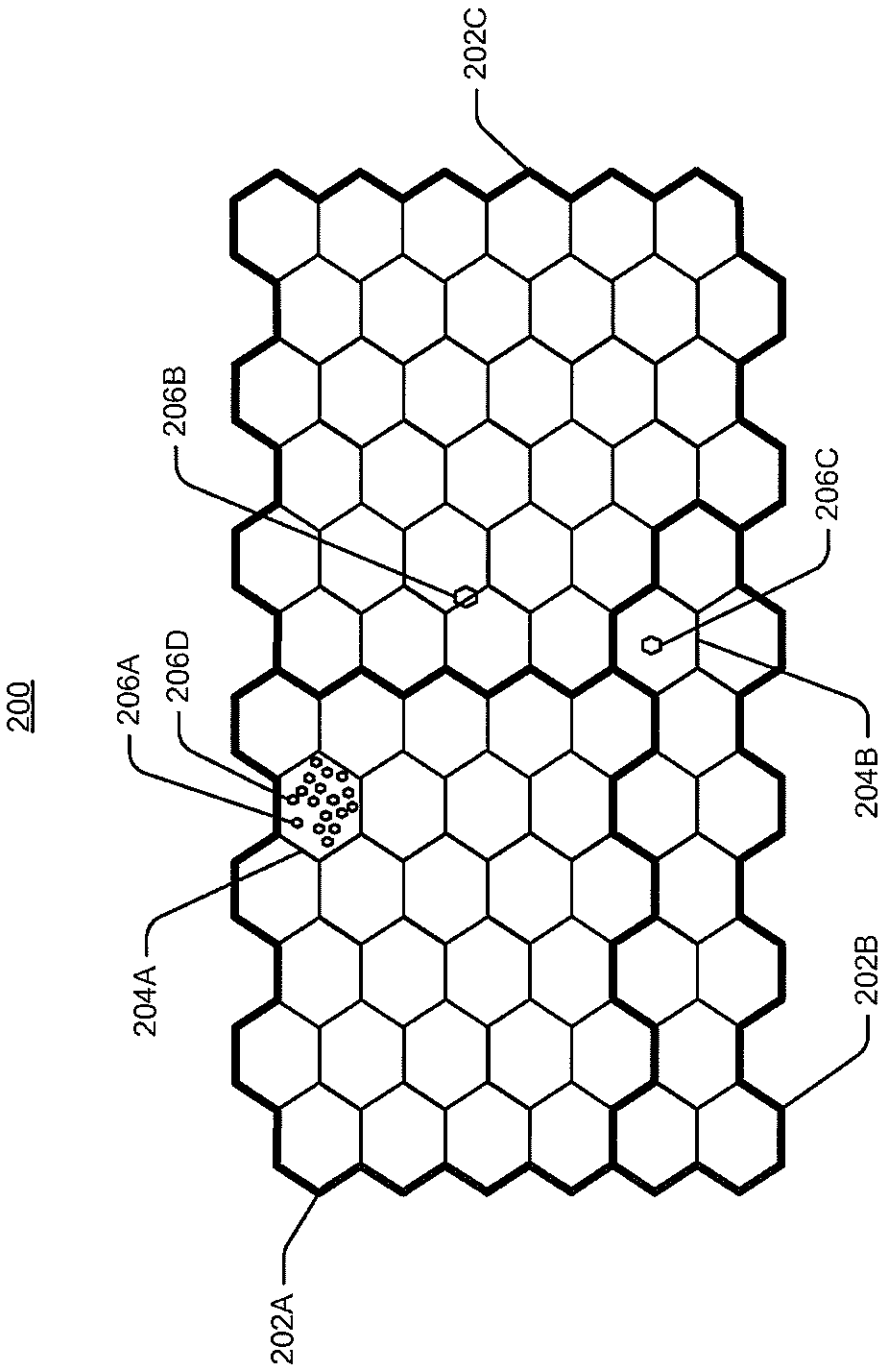


FIG. 2

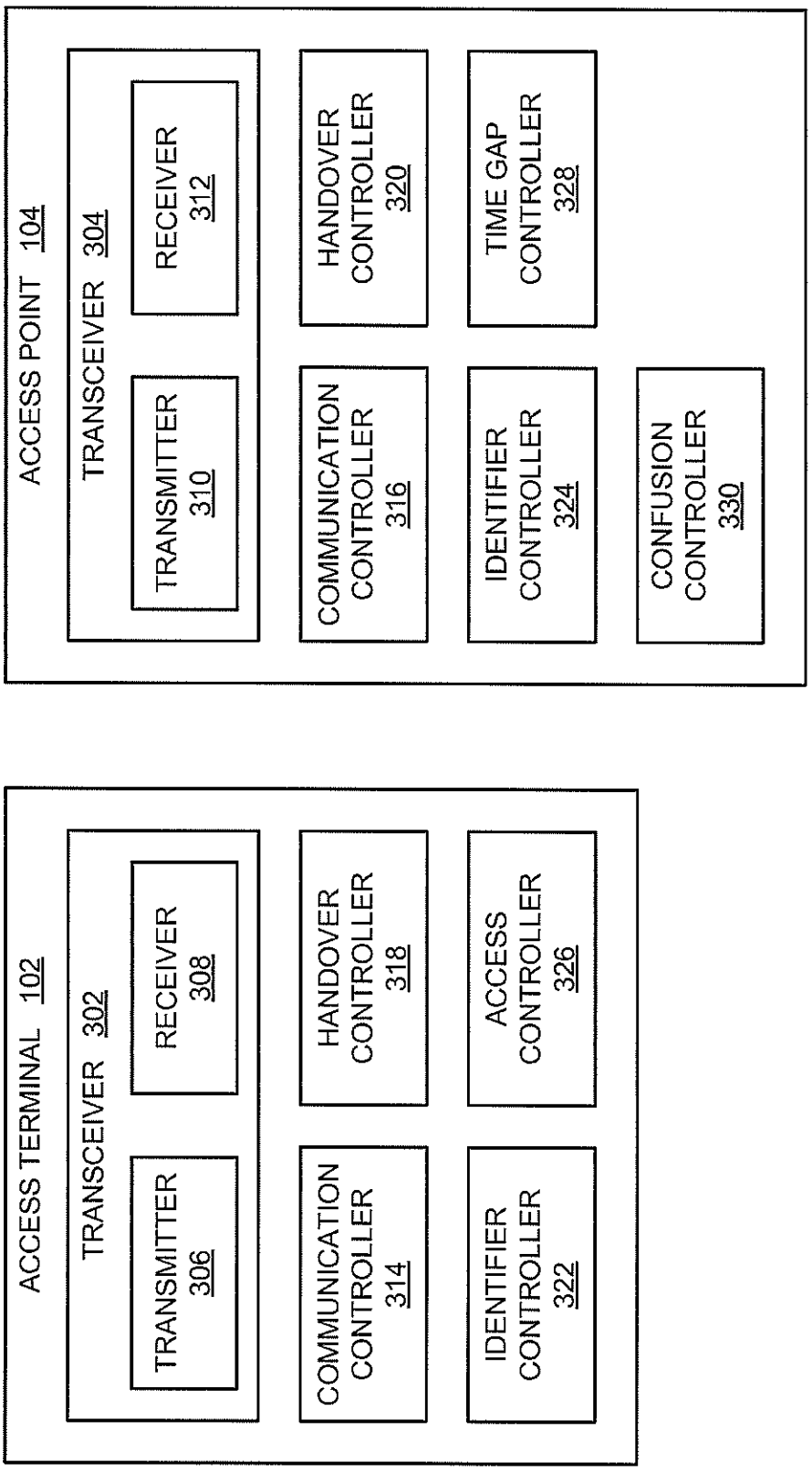

ACCESS TERMINAL 102
TRANSCEIVER 302
TRANSMITTER 306
RECEIVER 308
COMMUNICATION CONTROLLER 314
HANDOVER CONTROLLER 318
IDENTIFIER CONTROLLER 322
ACCESS CONTROLLER 326
ACCESS POINT 104
TRANSCEIVER 304
TRANSMITTER 310
RECEIVER 312
COMMUNICATION CONTROLLER 316
HANDOVER CONTROLLER 320
IDENTIFIER CONTROLLER 324
TIME GAP CONTROLLER 328
CONFUSION CONTROLLER 330

FIG. 3

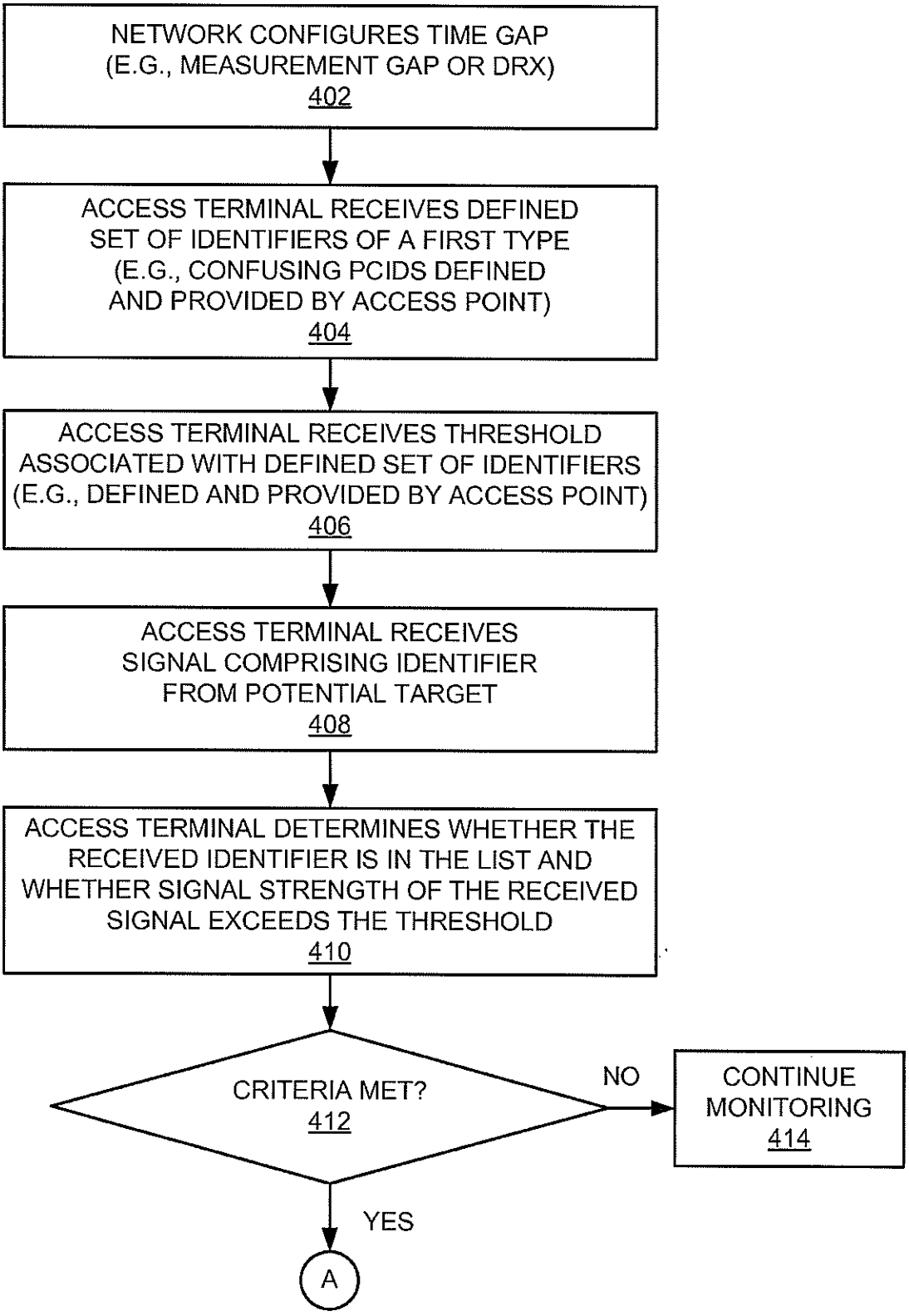

NETWORK CONFIGURES TIME GAP (E.G., MEASUREMENT GAP OR DRX) 402
ACCESS TERMINAL RECEIVES DEFINED SET OF IDENTIFIERS OF A FIRST TYPE (E.G., CONFUSING PCIDS DEFINED AND PROVIDED BY ACCESS POINT) 404
ACCESS TERMINAL RECEIVES THRESHOLD ASSOCIATED WITH DEFINED SET OF IDENTIFIERS (E.G., DEFINED AND PROVIDED BY ACCESS POINT) 406
ACCESS TERMINAL RECEIVES SIGNAL COMPRISING IDENTIFIER FROM POTENTIAL TARGET 408
ACCESS TERMINAL DETERMINES WHETHER THE RECEIVED IDENTIFIER IS IN THE LIST AND WHETHER SIGNAL STRENGTH OF THE RECEIVED SIGNAL EXCEEDS THE THRESHOLD 410
CRITERIA MET? 412
NO
CONTINUE MONITORING 414
YES
A

FIG. 4A

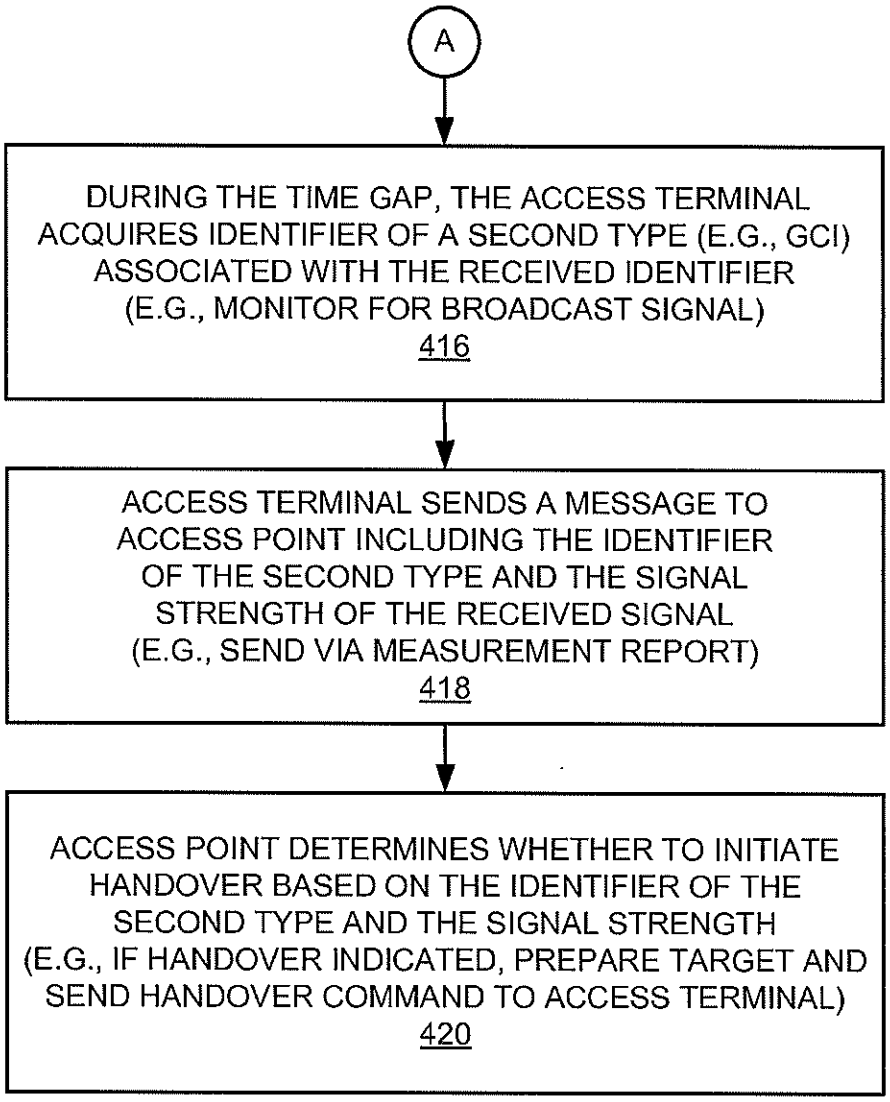

A
DURING THE TIME GAP, THE ACCESS TERMINAL ACQUIRES IDENTIFIER OF A SECOND TYPE (E.G., GCI) ASSOCIATED WITH THE RECEIVED IDENTIFIER (E.G., MONITOR FOR BROADCAST SIGNAL)
416
ACCESS TERMINAL SENDS A MESSAGE TO ACCESS POINT INCLUDING THE IDENTIFIER OF THE SECOND TYPE AND THE SIGNAL STRENGTH OF THE RECEIVED SIGNAL (E.G., SEND VIA MEASUREMENT REPORT)
418
ACCESS POINT DETERMINES WHETHER TO INITIATE HANDOVER BASED ON THE IDENTIFIER OF THE SECOND TYPE AND THE SIGNAL STRENGTH (E.G., IF HANDOVER INDICATED, PREPARE TARGET AND SEND HANDOVER COMMAND TO ACCESS TERMINAL)
420

FIG. 4B

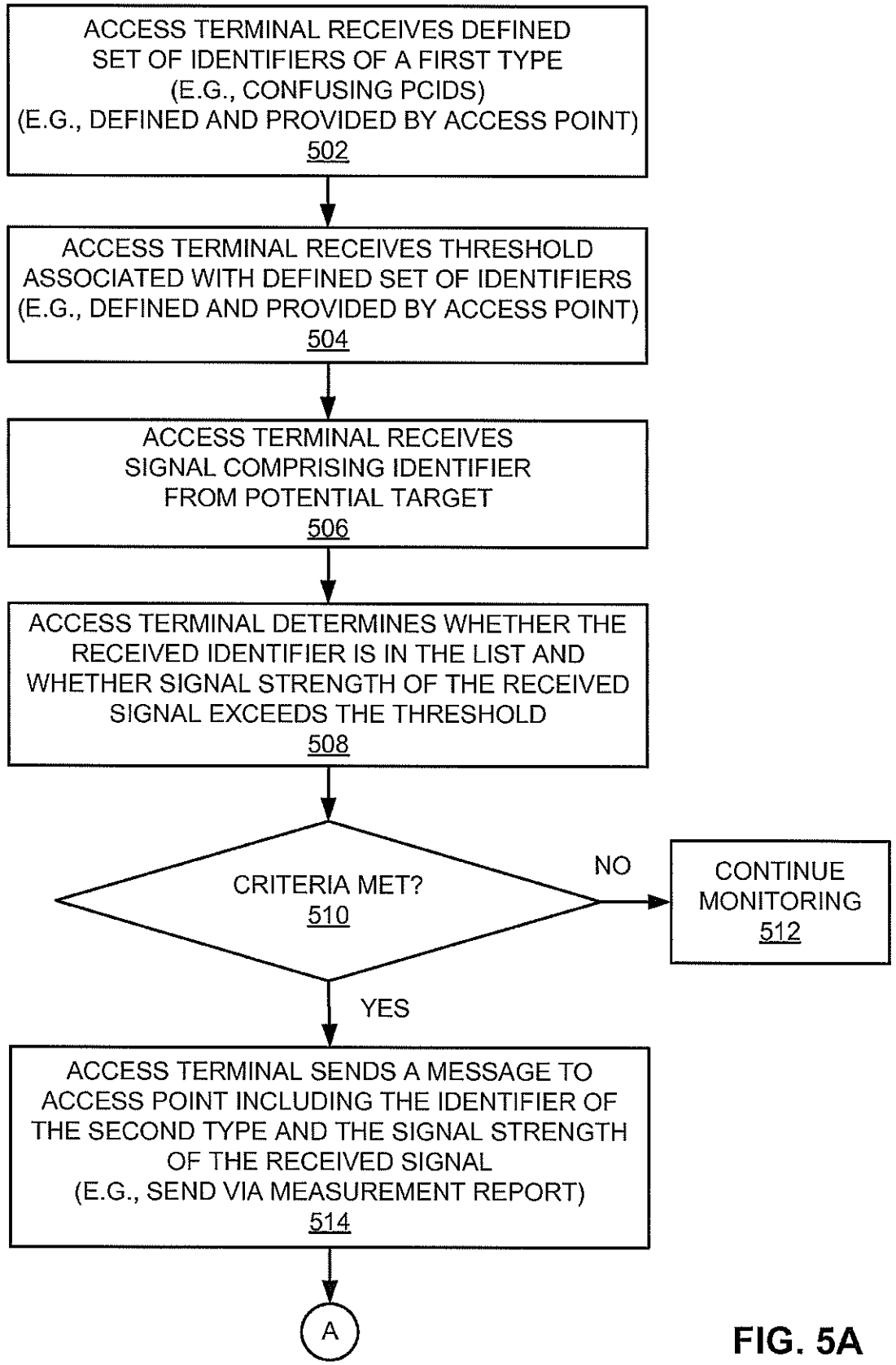

ACCESS TERMINAL RECEIVES DEFINED SET OF IDENTIFIERS OF A FIRST TYPE (E.G., CONFUSING PCIDS) (E.G., DEFINED AND PROVIDED BY ACCESS POINT) 502
ACCESS TERMINAL RECEIVES THRESHOLD ASSOCIATED WITH DEFINED SET OF IDENTIFIERS (E.G., DEFINED AND PROVIDED BY ACCESS POINT) 504
ACCESS TERMINAL RECEIVES SIGNAL COMPRISING IDENTIFIER FROM POTENTIAL TARGET 506
ACCESS TERMINAL DETERMINES WHETHER THE RECEIVED IDENTIFIER IS IN THE LIST AND WHETHER SIGNAL STRENGTH OF THE RECEIVED SIGNAL EXCEEDS THE THRESHOLD 508
CRITERIA MET? 510
NO
CONTINUE MONITORING 512
YES
ACCESS TERMINAL SENDS A MESSAGE TO ACCESS POINT INCLUDING THE IDENTIFIER OF THE SECOND TYPE AND THE SIGNAL STRENGTH OF THE RECEIVED SIGNAL (E.G., SEND VIA MEASUREMENT REPORT) 514
A

FIG. 5A

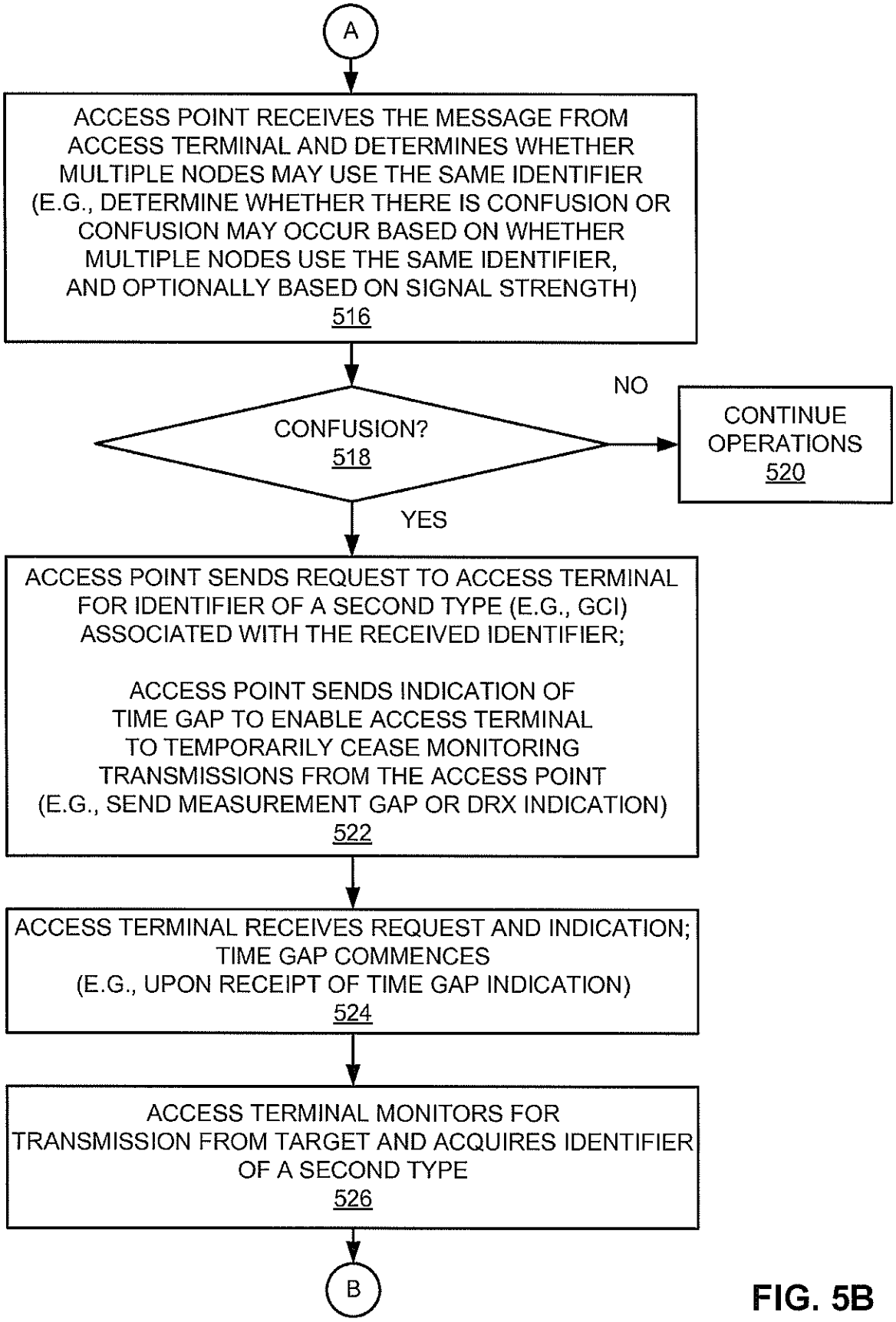

A
ACCESS POINT RECEIVES THE MESSAGE FROM ACCESS TERMINAL AND DETERMINES WHETHER MULTIPLE NODES MAY USE THE SAME IDENTIFIER (E.G., DETERMINE WHETHER THERE IS CONFUSION OR CONFUSION MAY OCCUR BASED ON WHETHER MULTIPLE NODES USE THE SAME IDENTIFIER, AND OPTIONALLY BASED ON SIGNAL STRENGTH)
516
CONFUSION?
518
NO
CONTINUE OPERATIONS
520
YES
ACCESS POINT SENDS REQUEST TO ACCESS TERMINAL FOR IDENTIFIER OF A SECOND TYPE (E.G., GCI) ASSOCIATED WITH THE RECEIVED IDENTIFIER;
ACCESS POINT SENDS INDICATION OF TIME GAP TO ENABLE ACCESS TERMINAL TO TEMPORARILY CEASE MONITORING TRANSMISSIONS FROM THE ACCESS POINT (E.G., SEND MEASUREMENT GAP OR DRX INDICATION)
522
ACCESS TERMINAL RECEIVES REQUEST AND INDICATION; TIME GAP COMMENCES (E.G., UPON RECEIPT OF TIME GAP INDICATION)
524
ACCESS TERMINAL MONITORS FOR TRANSMISSION FROM TARGET AND ACQUIRES IDENTIFIER OF A SECOND TYPE
526
B

FIG. 5B

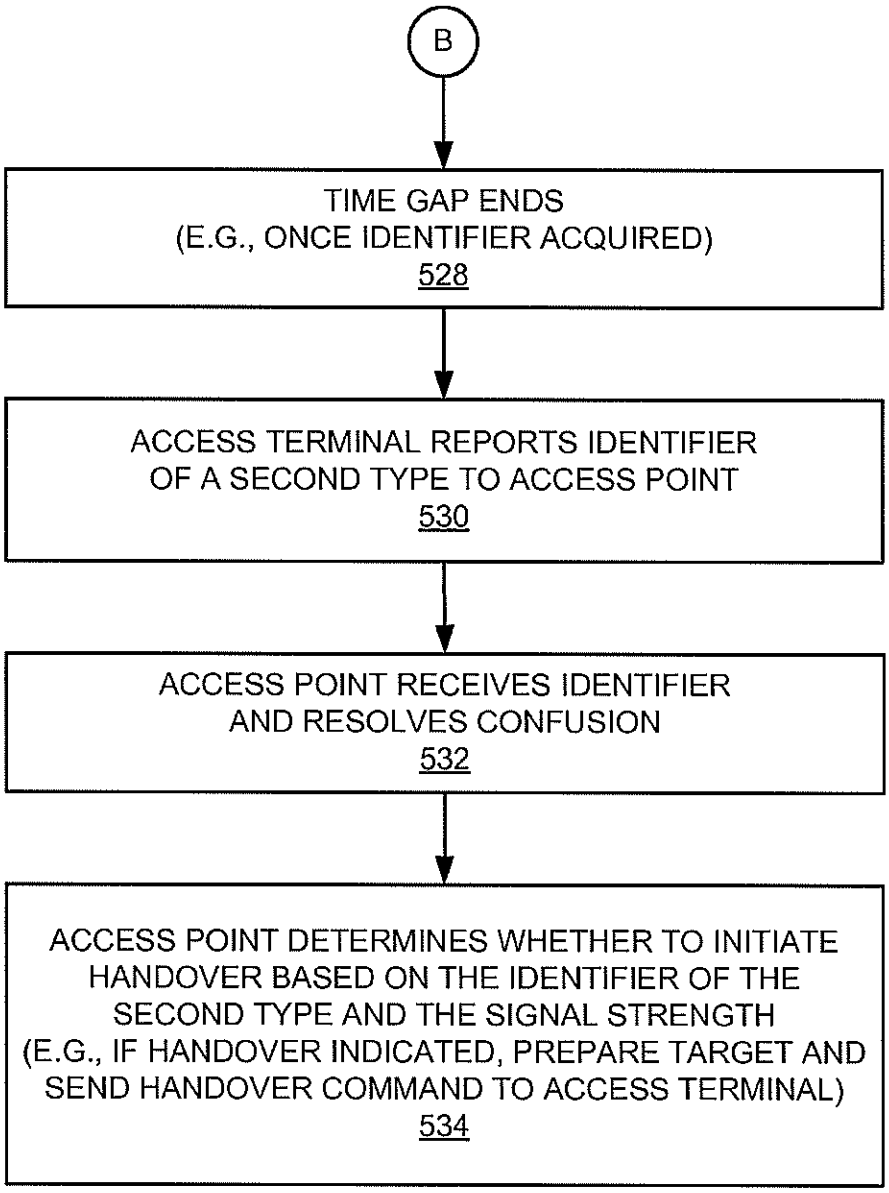

B
TIME GAP ENDS
(E.G., ONCE IDENTIFIER ACQUIRED)
528
ACCESS TERMINAL REPORTS IDENTIFIER
OF A SECOND TYPE TO ACCESS POINT
530
ACCESS POINT RECEIVES IDENTIFIER
AND RESOLVES CONFUSION
532
ACCESS POINT DETERMINES WHETHER TO INITIATE
HANDOVER BASED ON THE IDENTIFIER OF THE
SECOND TYPE AND THE SIGNAL STRENGTH
(E.G., IF HANDOVER INDICATED, PREPARE TARGET AND
SEND HANDOVER COMMAND TO ACCESS TERMINAL)
534

FIG. 5C

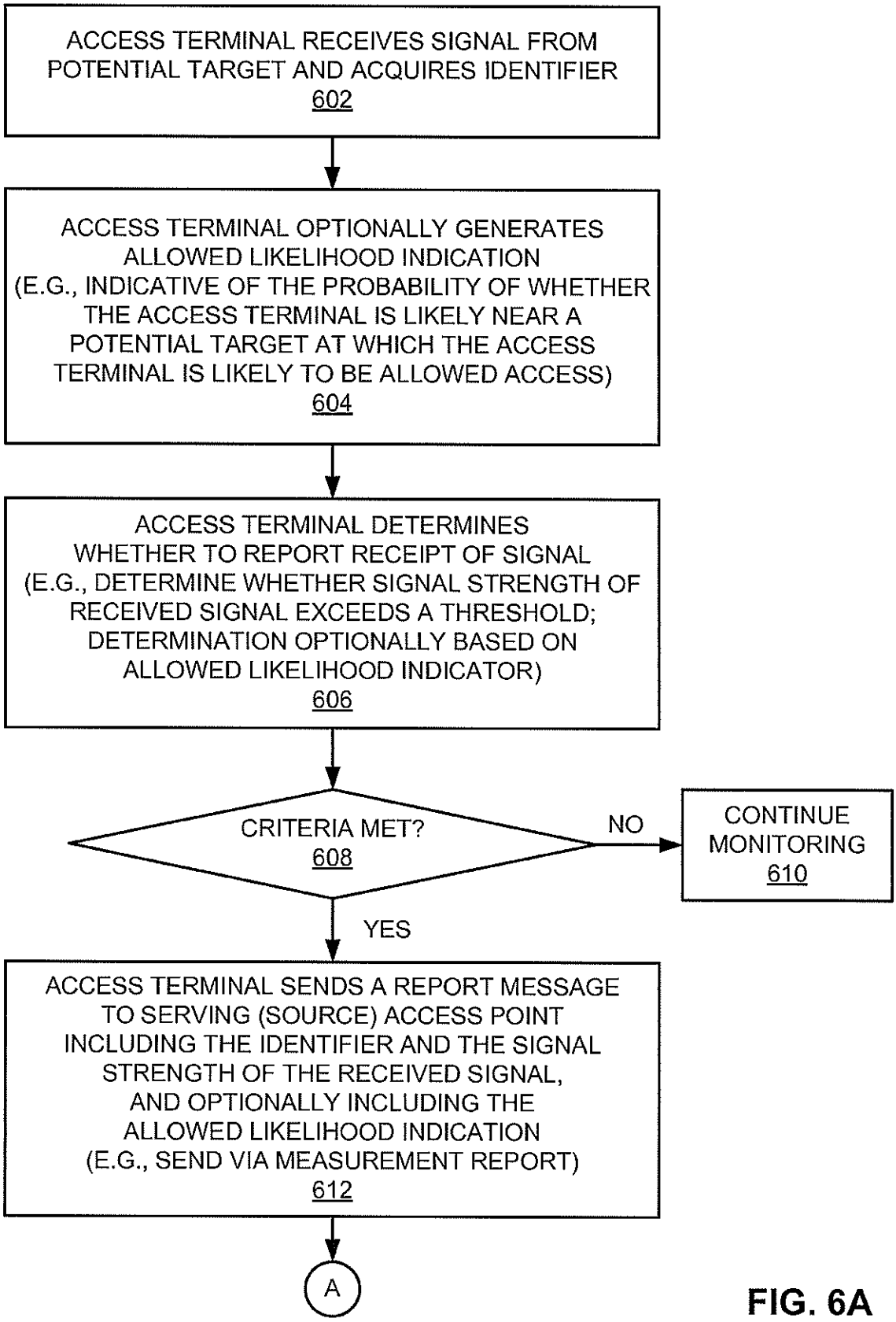

ACCESS TERMINAL RECEIVES SIGNAL FROM POTENTIAL TARGET AND ACQUIRES IDENTIFIER
602
ACCESS TERMINAL OPTIONALLY GENERATES ALLOWED LIKELIHOOD INDICATION (E.G., INDICATIVE OF THE PROBABILITY OF WHETHER THE ACCESS TERMINAL IS LIKELY NEAR A POTENTIAL TARGET AT WHICH THE ACCESS TERMINAL IS LIKELY TO BE ALLOWED ACCESS)
604
ACCESS TERMINAL DETERMINES WHETHER TO REPORT RECEIPT OF SIGNAL (E.G., DETERMINE WHETHER SIGNAL STRENGTH OF RECEIVED SIGNAL EXCEEDS A THRESHOLD; DETERMINATION OPTIONALLY BASED ON ALLOWED LIKELIHOOD INDICATOR)
606
CRITERIA MET?
608
NO
CONTINUE MONITORING
610
YES
ACCESS TERMINAL SENDS A REPORT MESSAGE TO SERVING (SOURCE) ACCESS POINT INCLUDING THE IDENTIFIER AND THE SIGNAL STRENGTH OF THE RECEIVED SIGNAL, AND OPTIONALLY INCLUDING THE ALLOWED LIKELIHOOD INDICATION (E.G., SEND VIA MEASUREMENT REPORT)
612
A

FIG. 6A

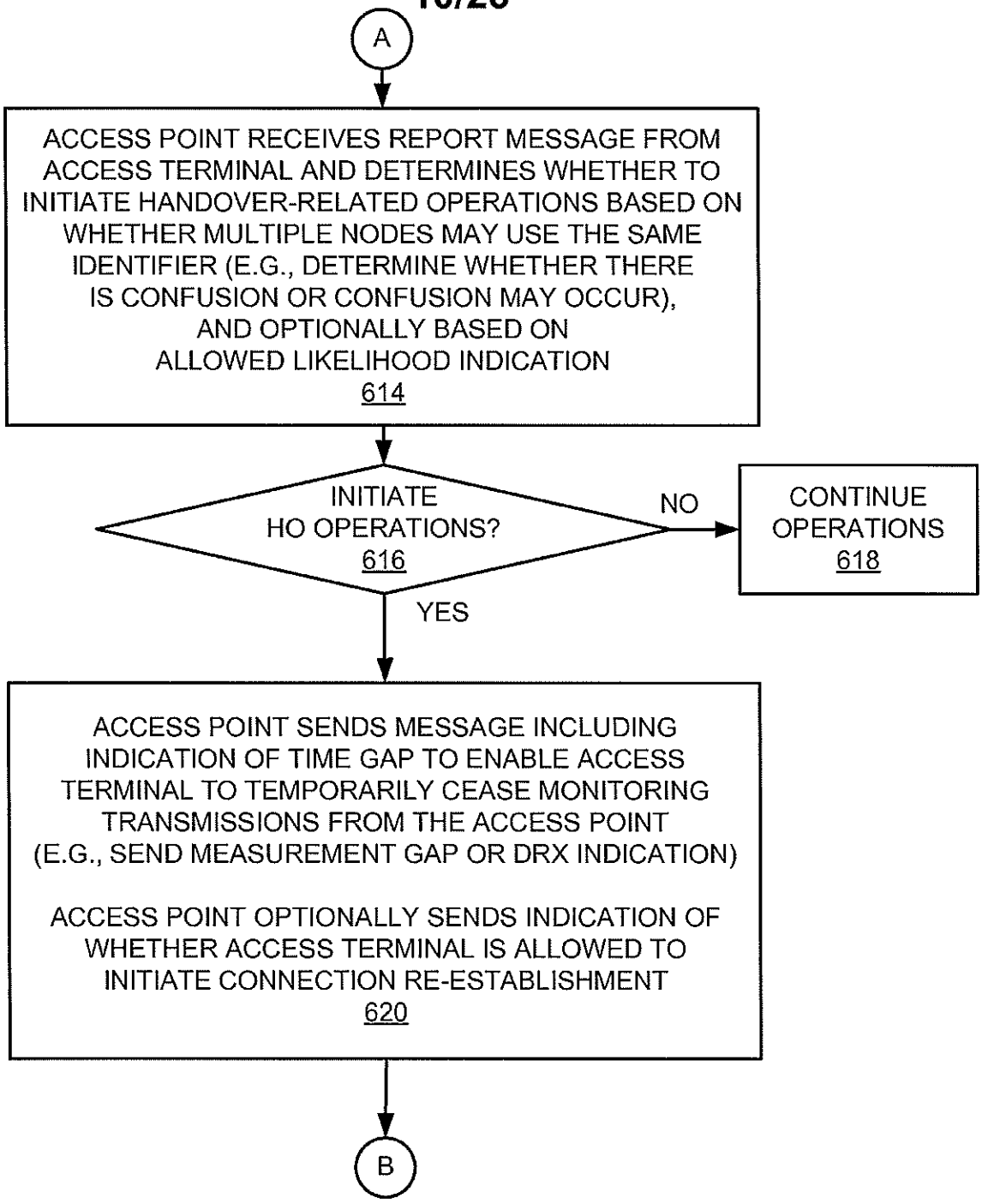

A
ACCESS POINT RECEIVES REPORT MESSAGE FROM ACCESS TERMINAL AND DETERMINES WHETHER TO INITIATE HANDOVER-RELATED OPERATIONS BASED ON WHETHER MULTIPLE NODES MAY USE THE SAME IDENTIFIER (E.G., DETERMINE WHETHER THERE IS CONFUSION OR CONFUSION MAY OCCUR), AND OPTIONALLY BASED ON ALLOWED LIKELIHOOD INDICATION
614
INITIATE HO OPERATIONS?
616
NO
CONTINUE OPERATIONS
618
YES
ACCESS POINT SENDS MESSAGE INCLUDING INDICATION OF TIME GAP TO ENABLE ACCESS TERMINAL TO TEMPORARILY CEASE MONITORING TRANSMISSIONS FROM THE ACCESS POINT (E.G., SEND MEASUREMENT GAP OR DRX INDICATION)
ACCESS POINT OPTIONALLY SENDS INDICATION OF WHETHER ACCESS TERMINAL IS ALLOWED TO INITIATE CONNECTION RE-ESTABLISHMENT
620
B

FIG. 6B

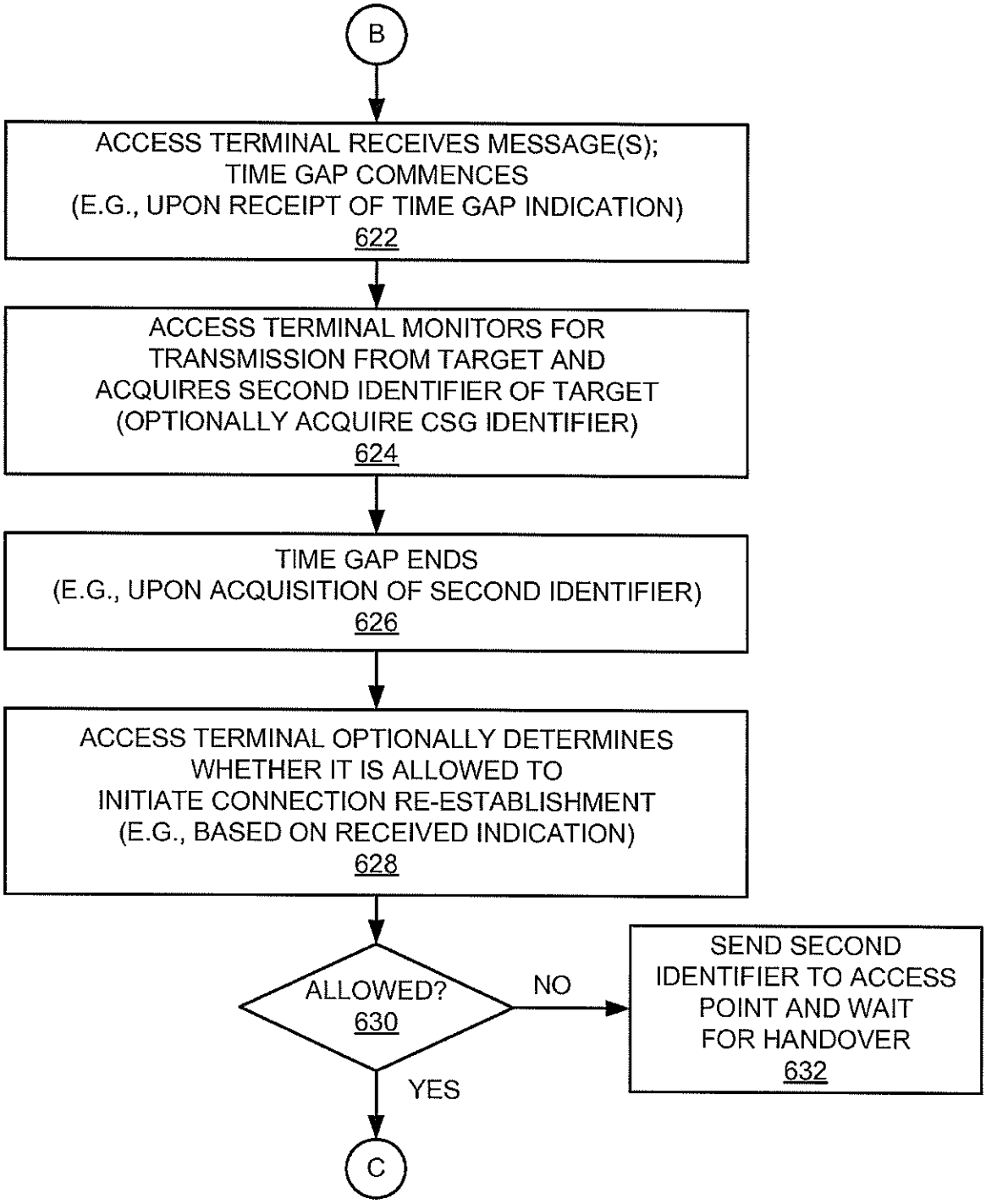

B
ACCESS TERMINAL RECEIVES MESSAGE(S);
TIME GAP COMMENCES
(E.G., UPON RECEIPT OF TIME GAP INDICATION)
622
ACCESS TERMINAL MONITORS FOR
TRANSMISSION FROM TARGET AND
ACQUIRES SECOND IDENTIFIER OF TARGET
(OPTIONALLY ACQUIRE CSG IDENTIFIER)
624
TIME GAP ENDS
(E.G., UPON ACQUISITION OF SECOND IDENTIFIER)
626
ACCESS TERMINAL OPTIONALLY DETERMINES
WHETHER IT IS ALLOWED TO
INITIATE CONNECTION RE-ESTABLISHMENT
(E.G., BASED ON RECEIVED INDICATION)
628
ALLOWED?
630
NO
SEND SECOND
IDENTIFIER TO ACCESS
POINT AND WAIT
FOR HANDOVER
632
YES
C

FIG. 6C

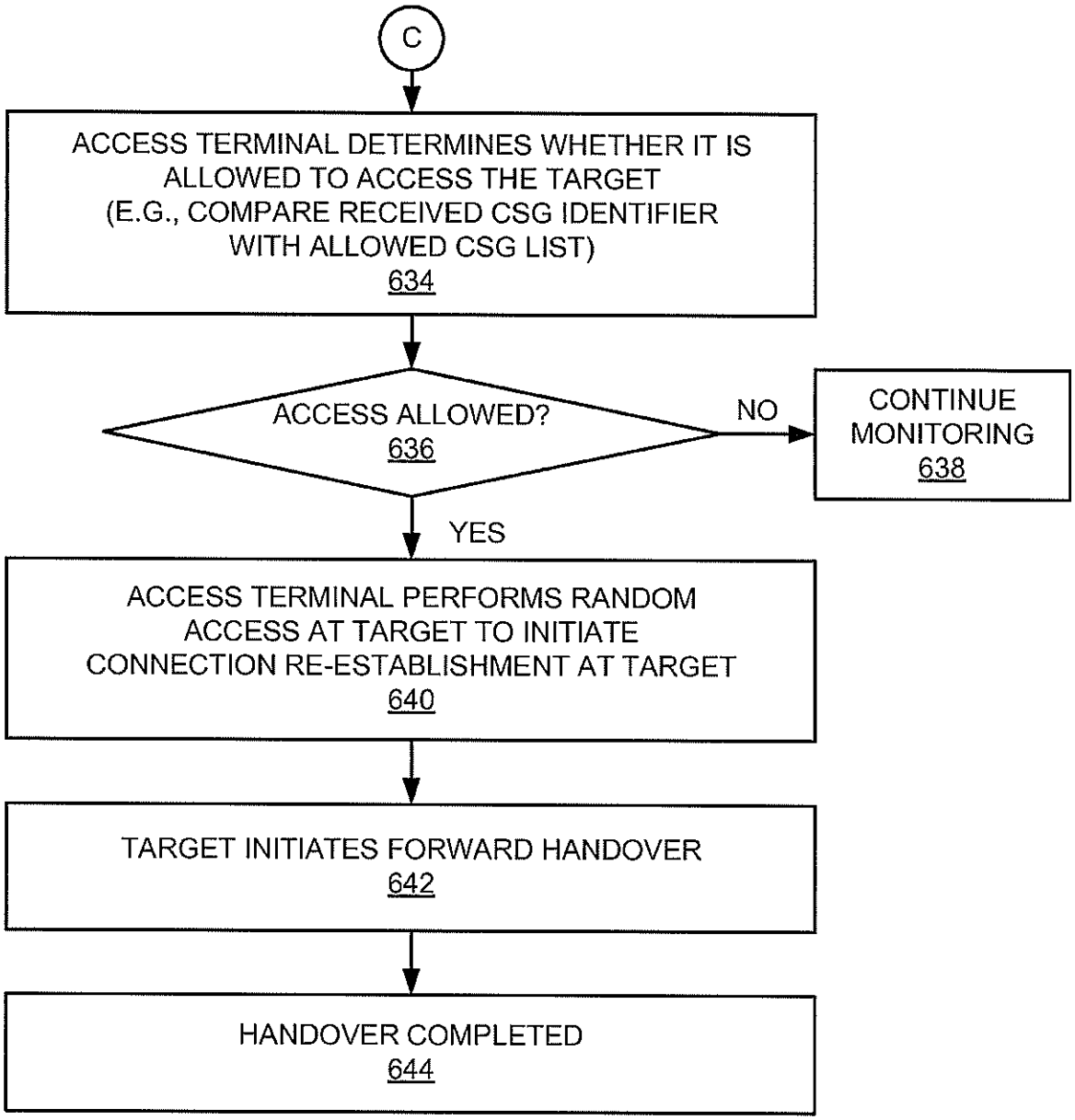

C
ACCESS TERMINAL DETERMINES WHETHER IT IS ALLOWED TO ACCESS THE TARGET (E.G., COMPARE RECEIVED CSG IDENTIFIER WITH ALLOWED CSG LIST)
634
ACCESS ALLOWED?
636
NO
CONTINUE MONITORING
638
YES
ACCESS TERMINAL PERFORMS RANDOM ACCESS AT TARGET TO INITIATE CONNECTION RE-ESTABLISHMENT AT TARGET
640
TARGET INITIATES FORWARD HANDOVER
642
HANDOVER COMPLETED
644

FIG. 6D

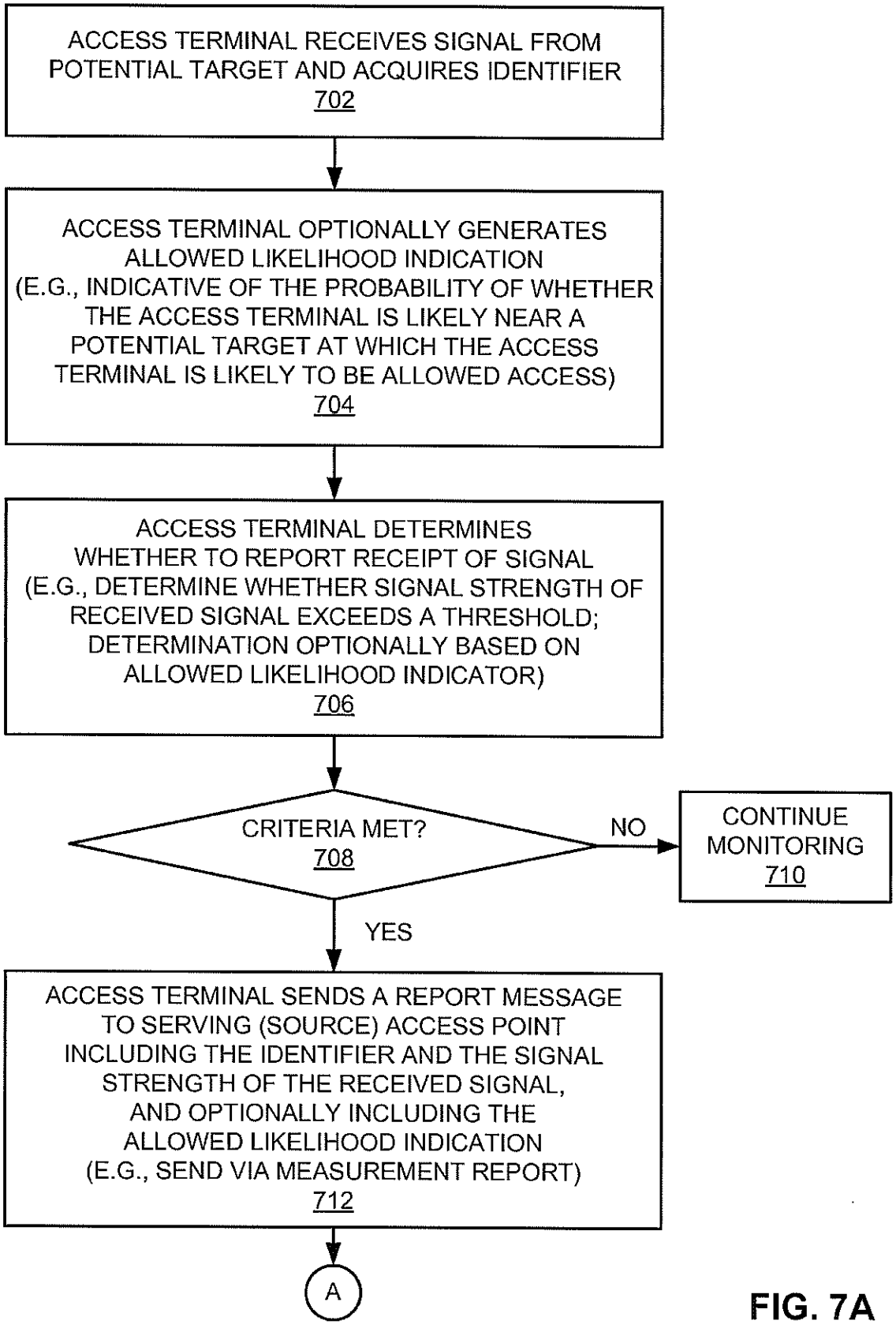

ACCESS TERMINAL RECEIVES SIGNAL FROM POTENTIAL TARGET AND ACQUIRES IDENTIFIER
702
ACCESS TERMINAL OPTIONALLY GENERATES ALLOWED LIKELIHOOD INDICATION (E.G., INDICATIVE OF THE PROBABILITY OF WHETHER THE ACCESS TERMINAL IS LIKELY NEAR A POTENTIAL TARGET AT WHICH THE ACCESS TERMINAL IS LIKELY TO BE ALLOWED ACCESS)
704
ACCESS TERMINAL DETERMINES WHETHER TO REPORT RECEIPT OF SIGNAL (E.G., DETERMINE WHETHER SIGNAL STRENGTH OF RECEIVED SIGNAL EXCEEDS A THRESHOLD; DETERMINATION OPTIONALLY BASED ON ALLOWED LIKELIHOOD INDICATOR)
706
CRITERIA MET?
708
NO
CONTINUE MONITORING
710
YES
ACCESS TERMINAL SENDS A REPORT MESSAGE TO SERVING (SOURCE) ACCESS POINT INCLUDING THE IDENTIFIER AND THE SIGNAL STRENGTH OF THE RECEIVED SIGNAL, AND OPTIONALLY INCLUDING THE ALLOWED LIKELIHOOD INDICATION (E.G., SEND VIA MEASUREMENT REPORT)
712
A

FIG. 7A

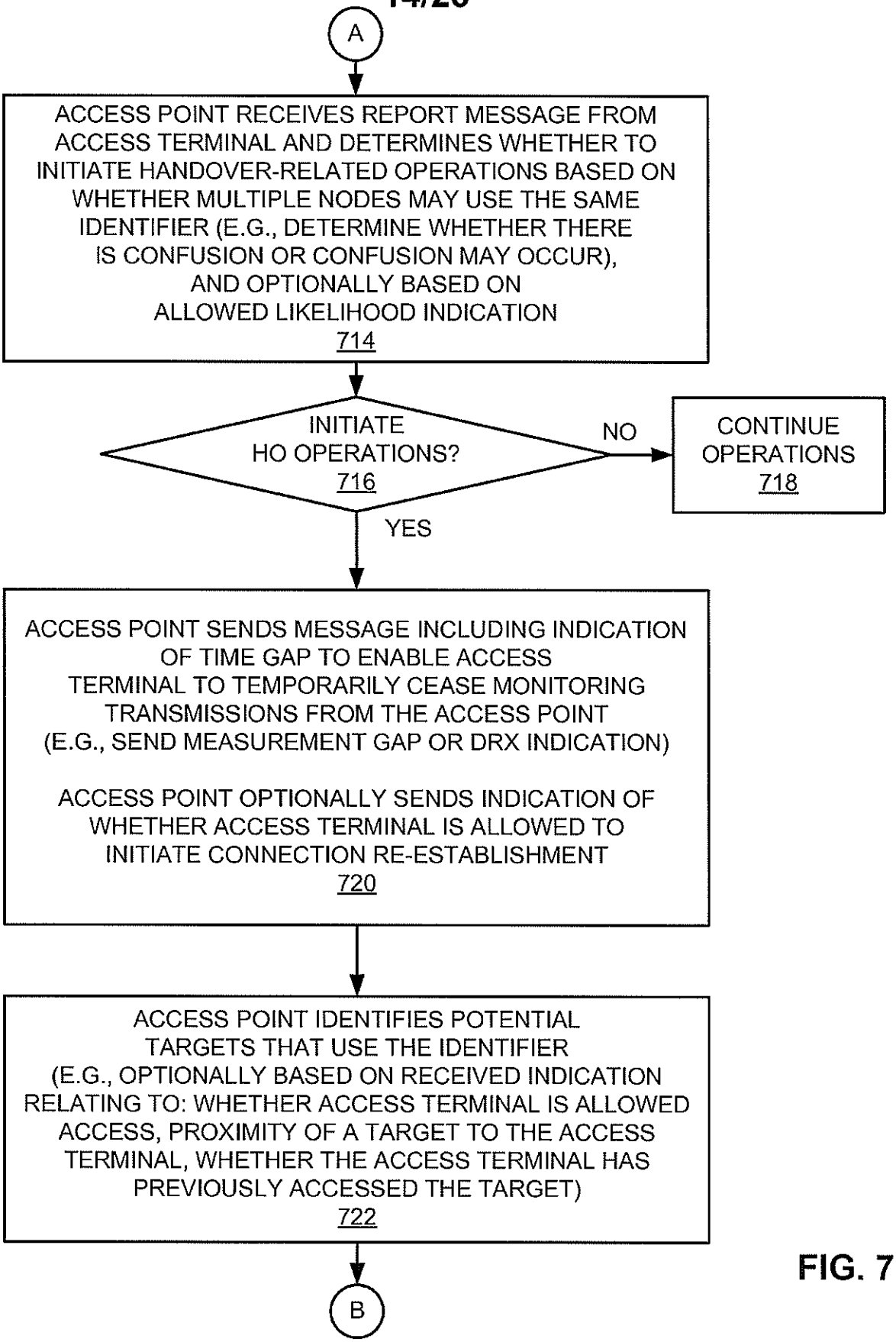

A
ACCESS POINT RECEIVES REPORT MESSAGE FROM ACCESS TERMINAL AND DETERMINES WHETHER TO INITIATE HANDOVER-RELATED OPERATIONS BASED ON WHETHER MULTIPLE NODES MAY USE THE SAME IDENTIFIER (E.G., DETERMINE WHETHER THERE IS CONFUSION OR CONFUSION MAY OCCUR), AND OPTIONALLY BASED ON ALLOWED LIKELIHOOD INDICATION
714
INITIATE HO OPERATIONS?
716
NO
CONTINUE OPERATIONS
718
YES
ACCESS POINT SENDS MESSAGE INCLUDING INDICATION OF TIME GAP TO ENABLE ACCESS TERMINAL TO TEMPORARILY CEASE MONITORING TRANSMISSIONS FROM THE ACCESS POINT (E.G., SEND MEASUREMENT GAP OR DRX INDICATION)
ACCESS POINT OPTIONALLY SENDS INDICATION OF WHETHER ACCESS TERMINAL IS ALLOWED TO INITIATE CONNECTION RE-ESTABLISHMENT
720
ACCESS POINT IDENTIFIES POTENTIAL TARGETS THAT USE THE IDENTIFIER (E.G., OPTIONALLY BASED ON RECEIVED INDICATION RELATING TO: WHETHER ACCESS TERMINAL IS ALLOWED ACCESS, PROXIMITY OF A TARGET TO THE ACCESS TERMINAL, WHETHER THE ACCESS TERMINAL HAS PREVIOUSLY ACCESSED THE TARGET)
722
B

FIG. 7B

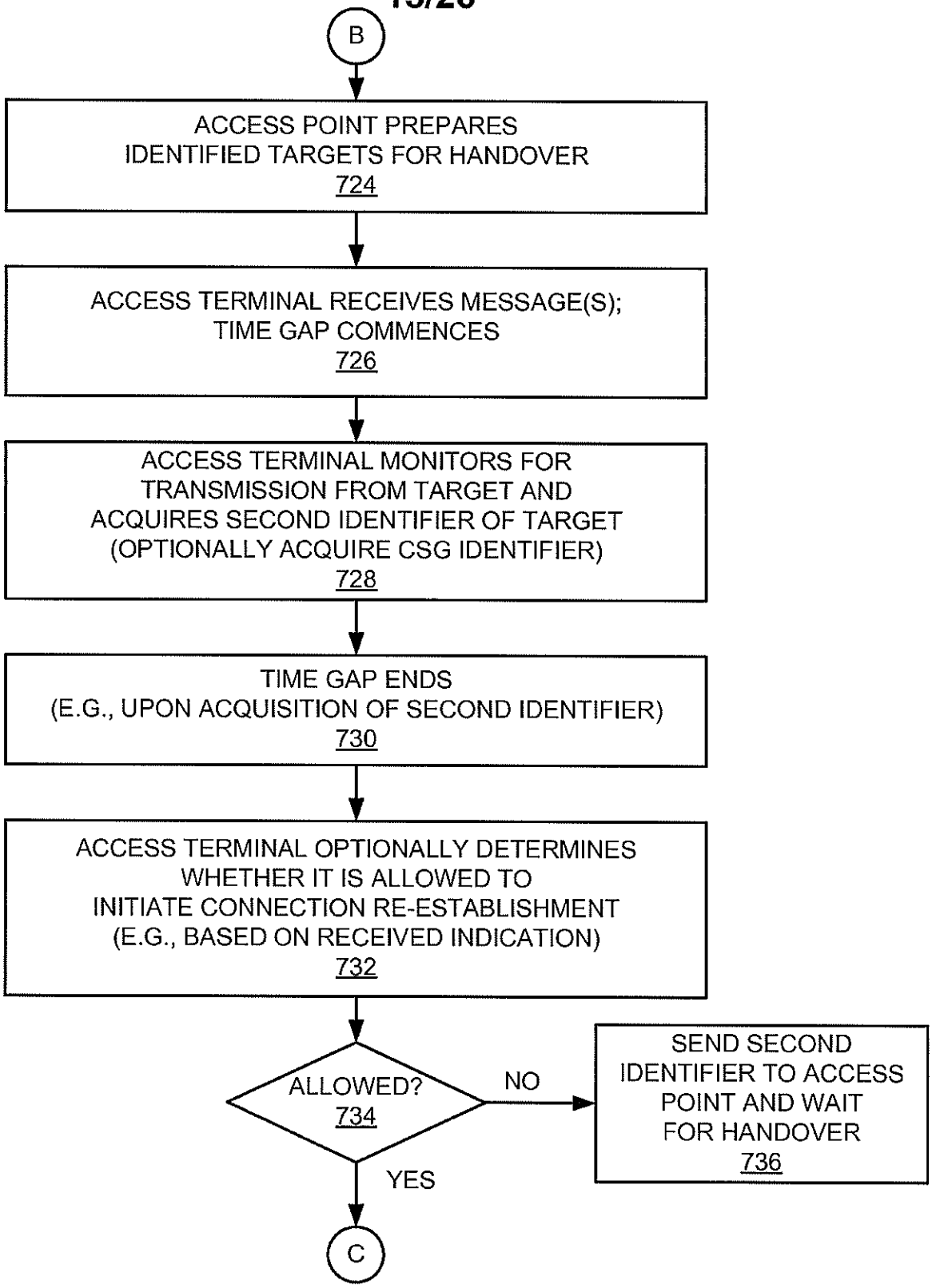

B
ACCESS POINT PREPARES IDENTIFIED TARGETS FOR HANDOVER 724
ACCESS TERMINAL RECEIVES MESSAGE(S); TIME GAP COMMENCES 726
ACCESS TERMINAL MONITORS FOR TRANSMISSION FROM TARGET AND ACQUIRES SECOND IDENTIFIER OF TARGET (OPTIONALLY ACQUIRE CSG IDENTIFIER) 728
TIME GAP ENDS (E.G., UPON ACQUISITION OF SECOND IDENTIFIER) 730
ACCESS TERMINAL OPTIONALLY DETERMINES WHETHER IT IS ALLOWED TO INITIATE CONNECTION RE-ESTABLISHMENT (E.G., BASED ON RECEIVED INDICATION) 732
ALLOWED? 734
NO
SEND SECOND IDENTIFIER TO ACCESS POINT AND WAIT FOR HANDOVER 736
YES
C

FIG. 7C

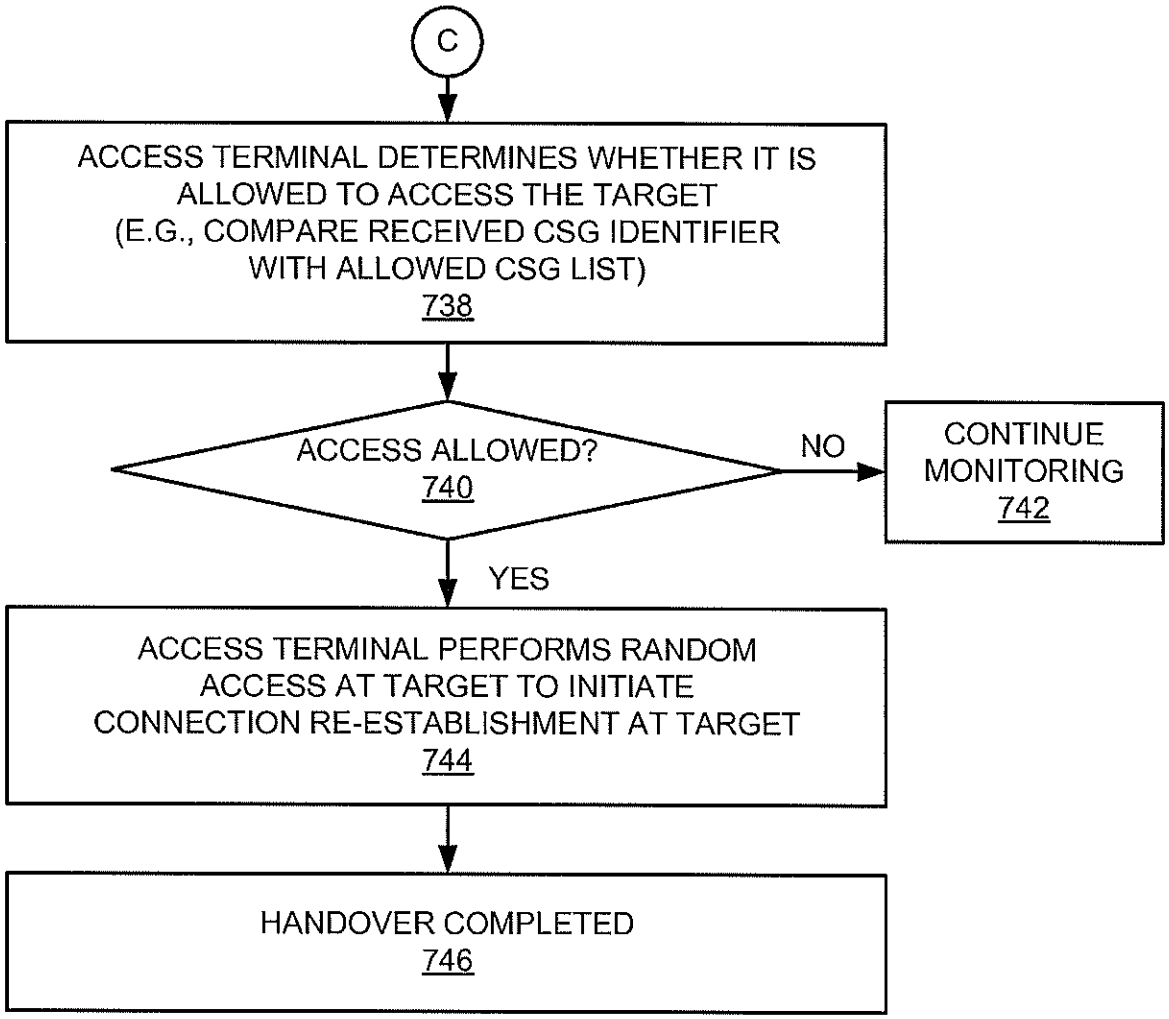

C
ACCESS TERMINAL DETERMINES WHETHER IT IS ALLOWED TO ACCESS THE TARGET (E.G., COMPARE RECEIVED CSG IDENTIFIER WITH ALLOWED CSG LIST)
738
ACCESS ALLOWED?
740
NO
CONTINUE MONITORING
742
YES
ACCESS TERMINAL PERFORMS RANDOM ACCESS AT TARGET TO INITIATE CONNECTION RE-ESTABLISHMENT AT TARGET
744
HANDOVER COMPLETED
746

FIG. 7D

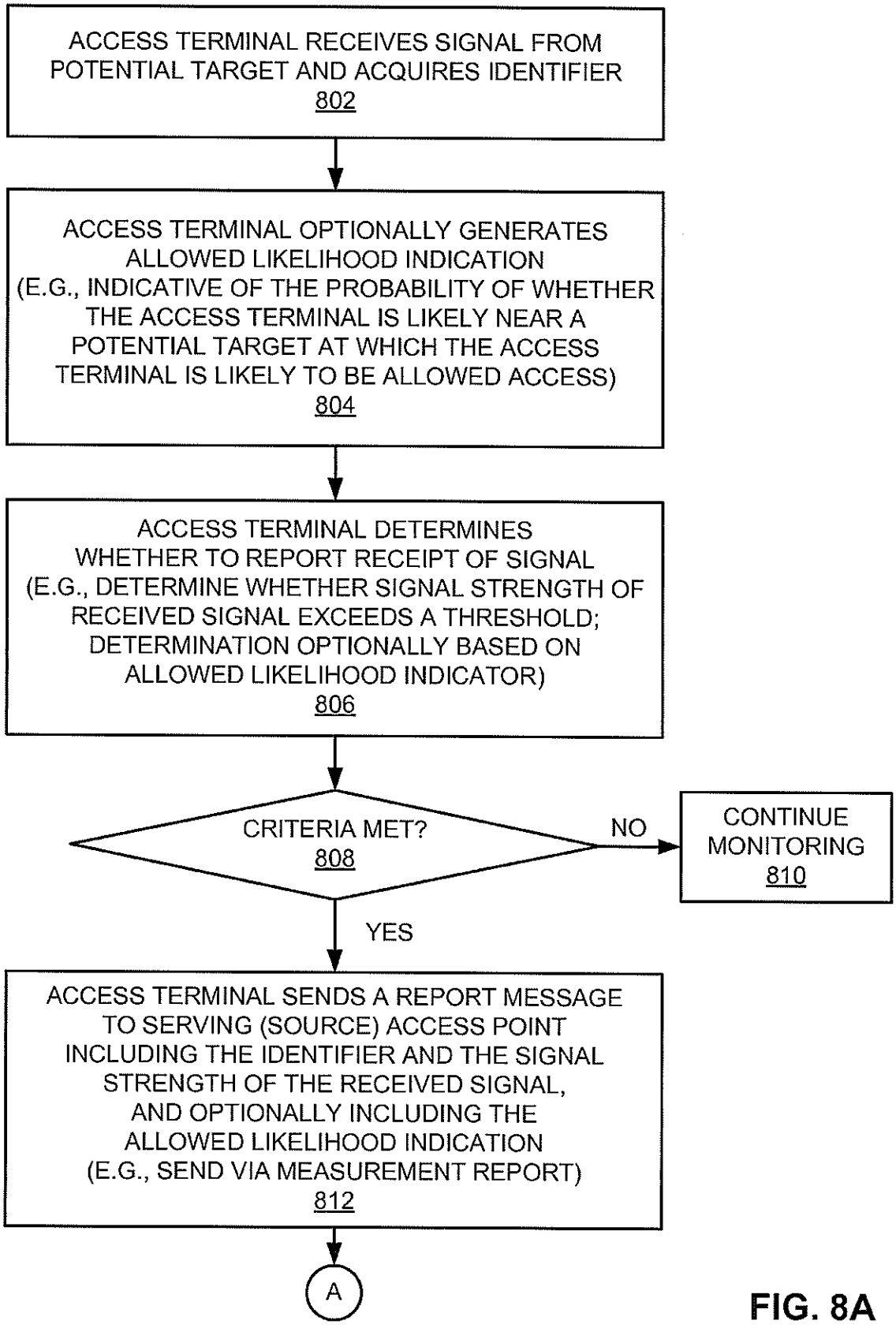

ACCESS TERMINAL RECEIVES SIGNAL FROM POTENTIAL TARGET AND ACQUIRES IDENTIFIER
802
ACCESS TERMINAL OPTIONALLY GENERATES ALLOWED LIKELIHOOD INDICATION (E.G., INDICATIVE OF THE PROBABILITY OF WHETHER THE ACCESS TERMINAL IS LIKELY NEAR A POTENTIAL TARGET AT WHICH THE ACCESS TERMINAL IS LIKELY TO BE ALLOWED ACCESS)
804
ACCESS TERMINAL DETERMINES WHETHER TO REPORT RECEIPT OF SIGNAL (E.G., DETERMINE WHETHER SIGNAL STRENGTH OF RECEIVED SIGNAL EXCEEDS A THRESHOLD; DETERMINATION OPTIONALLY BASED ON ALLOWED LIKELIHOOD INDICATOR)
806
CRITERIA MET?
808
NO
CONTINUE MONITORING
810
YES
ACCESS TERMINAL SENDS A REPORT MESSAGE TO SERVING (SOURCE) ACCESS POINT INCLUDING THE IDENTIFIER AND THE SIGNAL STRENGTH OF THE RECEIVED SIGNAL, AND OPTIONALLY INCLUDING THE ALLOWED LIKELIHOOD INDICATION (E.G., SEND VIA MEASUREMENT REPORT)
812
A

FIG. 8A

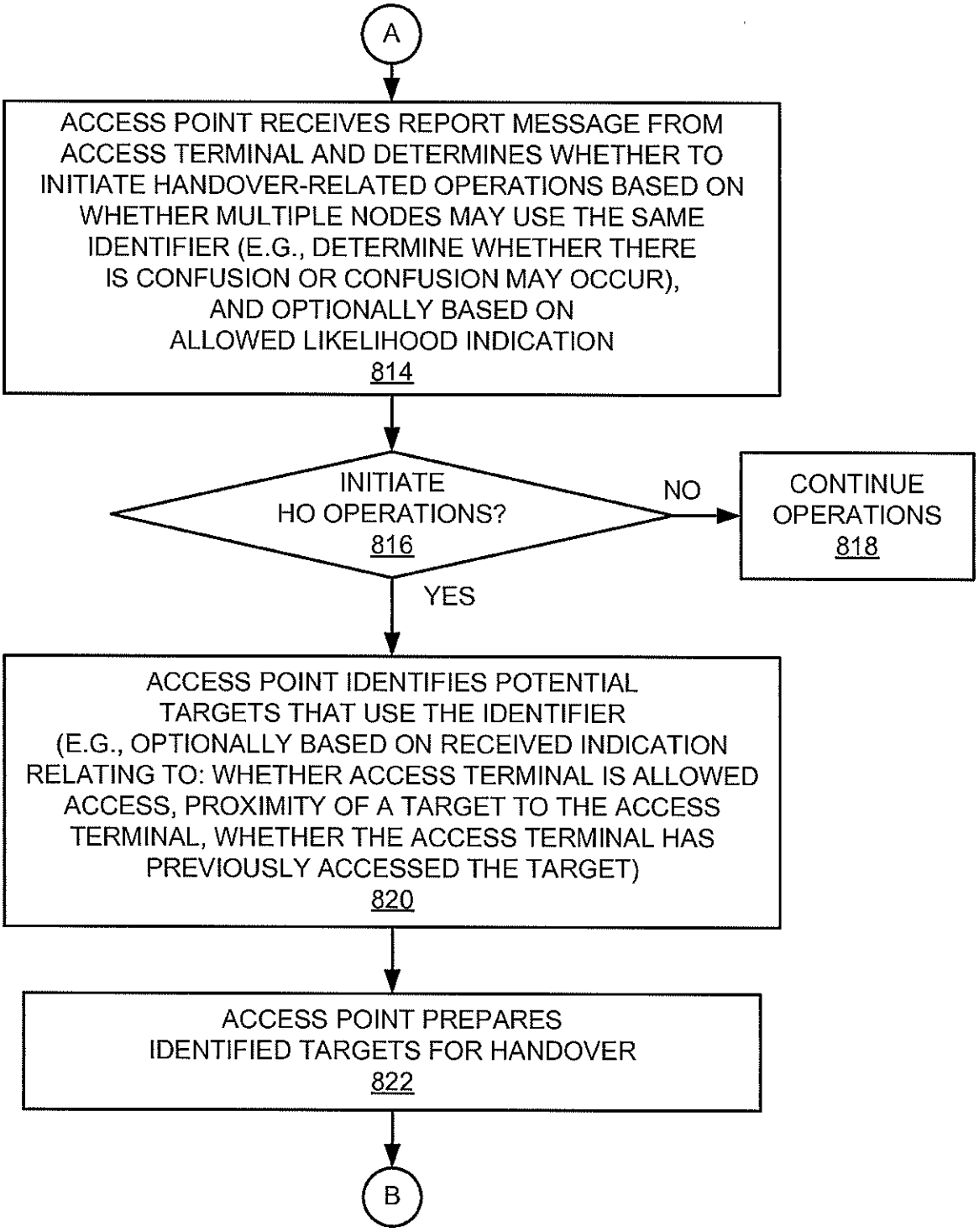

A
ACCESS POINT RECEIVES REPORT MESSAGE FROM ACCESS TERMINAL AND DETERMINES WHETHER TO INITIATE HANDOVER-RELATED OPERATIONS BASED ON WHETHER MULTIPLE NODES MAY USE THE SAME IDENTIFIER (E.G., DETERMINE WHETHER THERE IS CONFUSION OR CONFUSION MAY OCCUR), AND OPTIONALLY BASED ON ALLOWED LIKELIHOOD INDICATION
814
INITIATE HO OPERATIONS?
816
NO
CONTINUE OPERATIONS
818
YES
ACCESS POINT IDENTIFIES POTENTIAL TARGETS THAT USE THE IDENTIFIER (E.G., OPTIONALLY BASED ON RECEIVED INDICATION RELATING TO: WHETHER ACCESS TERMINAL IS ALLOWED ACCESS, PROXIMITY OF A TARGET TO THE ACCESS TERMINAL, WHETHER THE ACCESS TERMINAL HAS PREVIOUSLY ACCESSED THE TARGET)
820
ACCESS POINT PREPARES IDENTIFIED TARGETS FOR HANDOVER
822
B

FIG. 8B

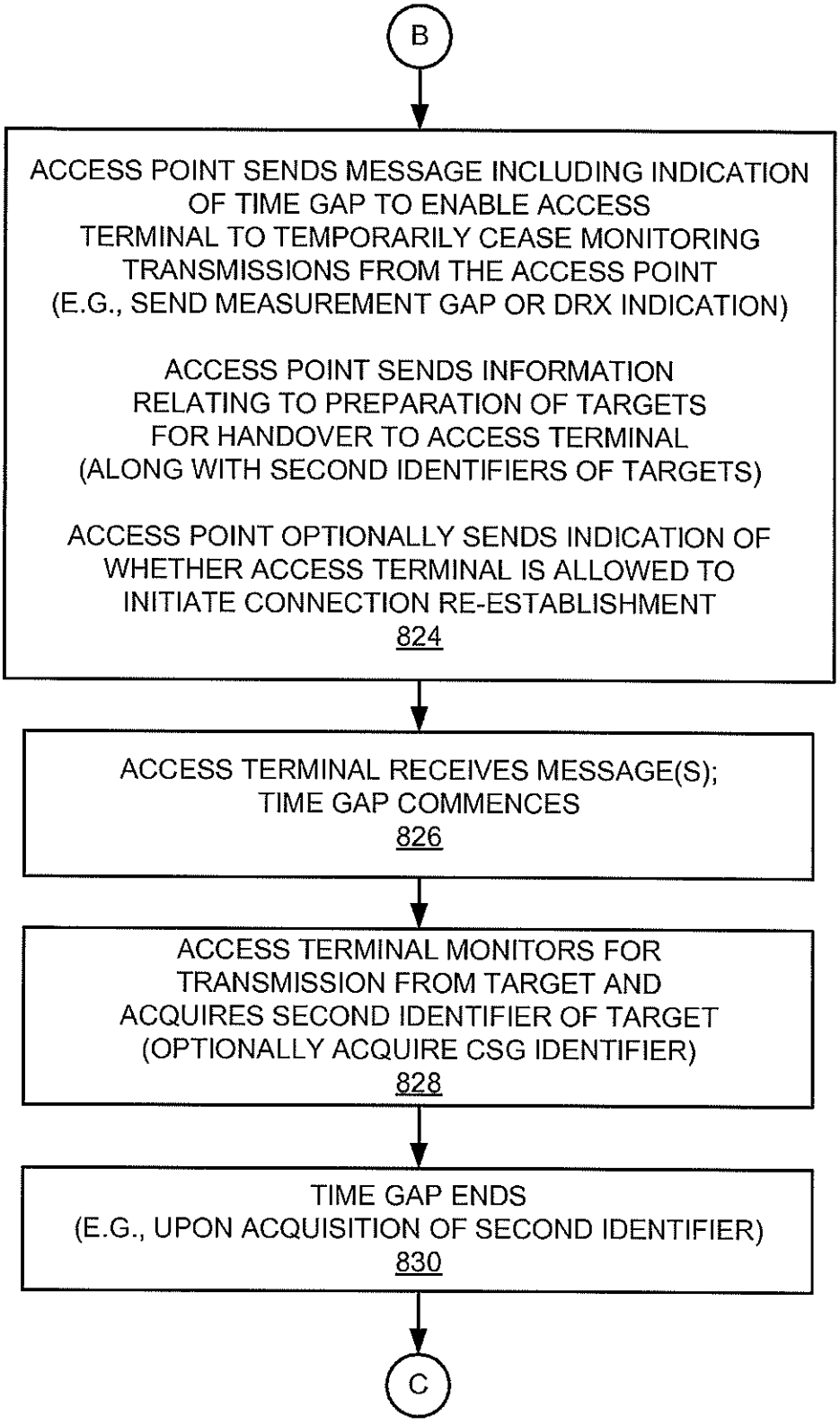

B
ACCESS POINT SENDS MESSAGE INCLUDING INDICATION OF TIME GAP TO ENABLE ACCESS TERMINAL TO TEMPORARILY CEASE MONITORING TRANSMISSIONS FROM THE ACCESS POINT (E.G., SEND MEASUREMENT GAP OR DRX INDICATION)
ACCESS POINT SENDS INFORMATION RELATING TO PREPARATION OF TARGETS FOR HANDOVER TO ACCESS TERMINAL (ALONG WITH SECOND IDENTIFIERS OF TARGETS)
ACCESS POINT OPTIONALLY SENDS INDICATION OF WHETHER ACCESS TERMINAL IS ALLOWED TO INITIATE CONNECTION RE-ESTABLISHMENT
824
ACCESS TERMINAL RECEIVES MESSAGE(S); TIME GAP COMMENCES
826
ACCESS TERMINAL MONITORS FOR TRANSMISSION FROM TARGET AND ACQUIRES SECOND IDENTIFIER OF TARGET (OPTIONALLY ACQUIRE CSG IDENTIFIER)
828
TIME GAP ENDS (E.G., UPON ACQUISITION OF SECOND IDENTIFIER)
830
C

FIG. 8C

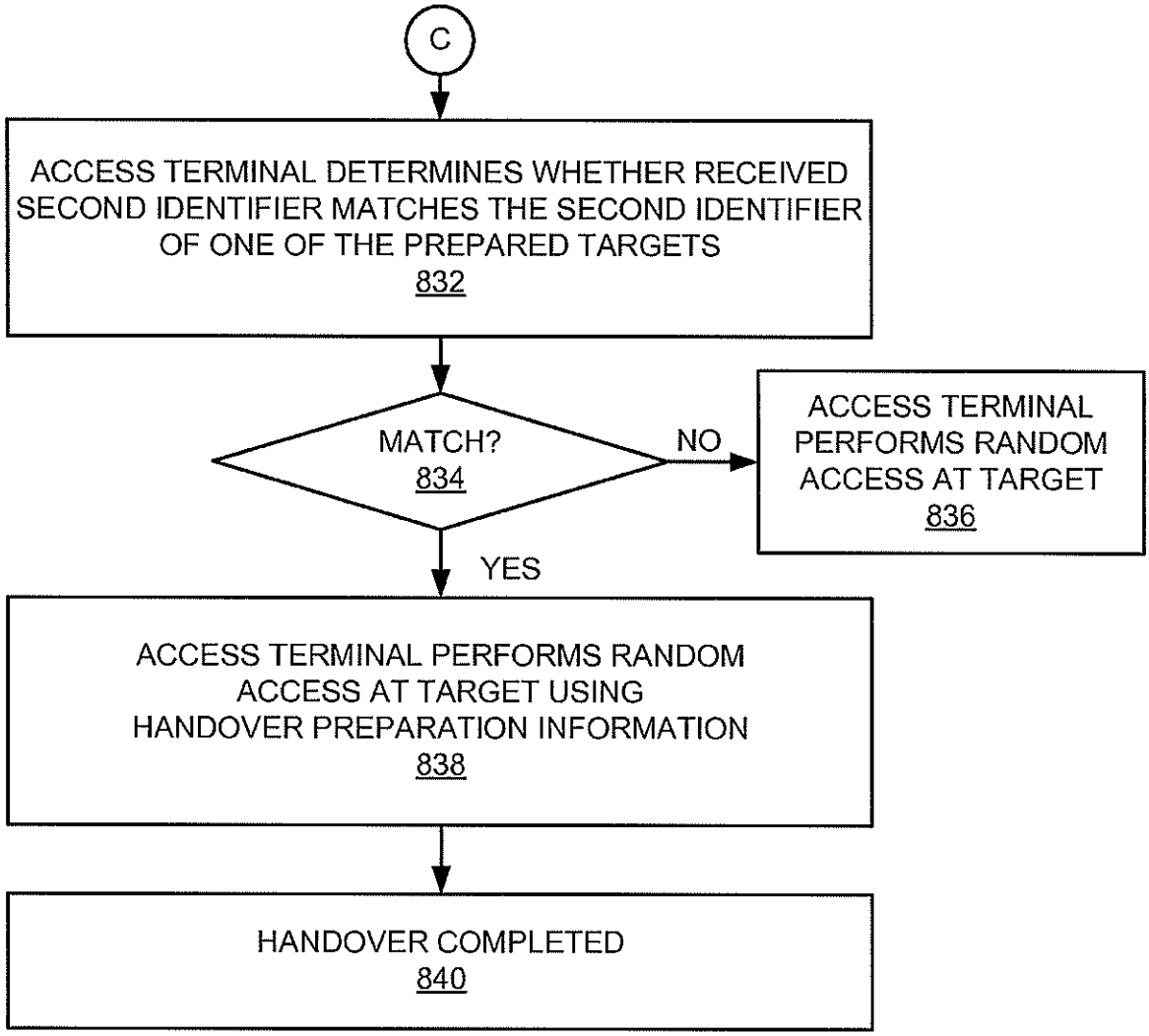

C
ACCESS TERMINAL DETERMINES WHETHER RECEIVED SECOND IDENTIFIER MATCHES THE SECOND IDENTIFIER OF ONE OF THE PREPARED TARGETS
832
MATCH?
834
NO
ACCESS TERMINAL PERFORMS RANDOM ACCESS AT TARGET
836
YES
ACCESS TERMINAL PERFORMS RANDOM ACCESS AT TARGET USING HANDOVER PREPARATION INFORMATION
838
HANDOVER COMPLETED
840

FIG. 8D

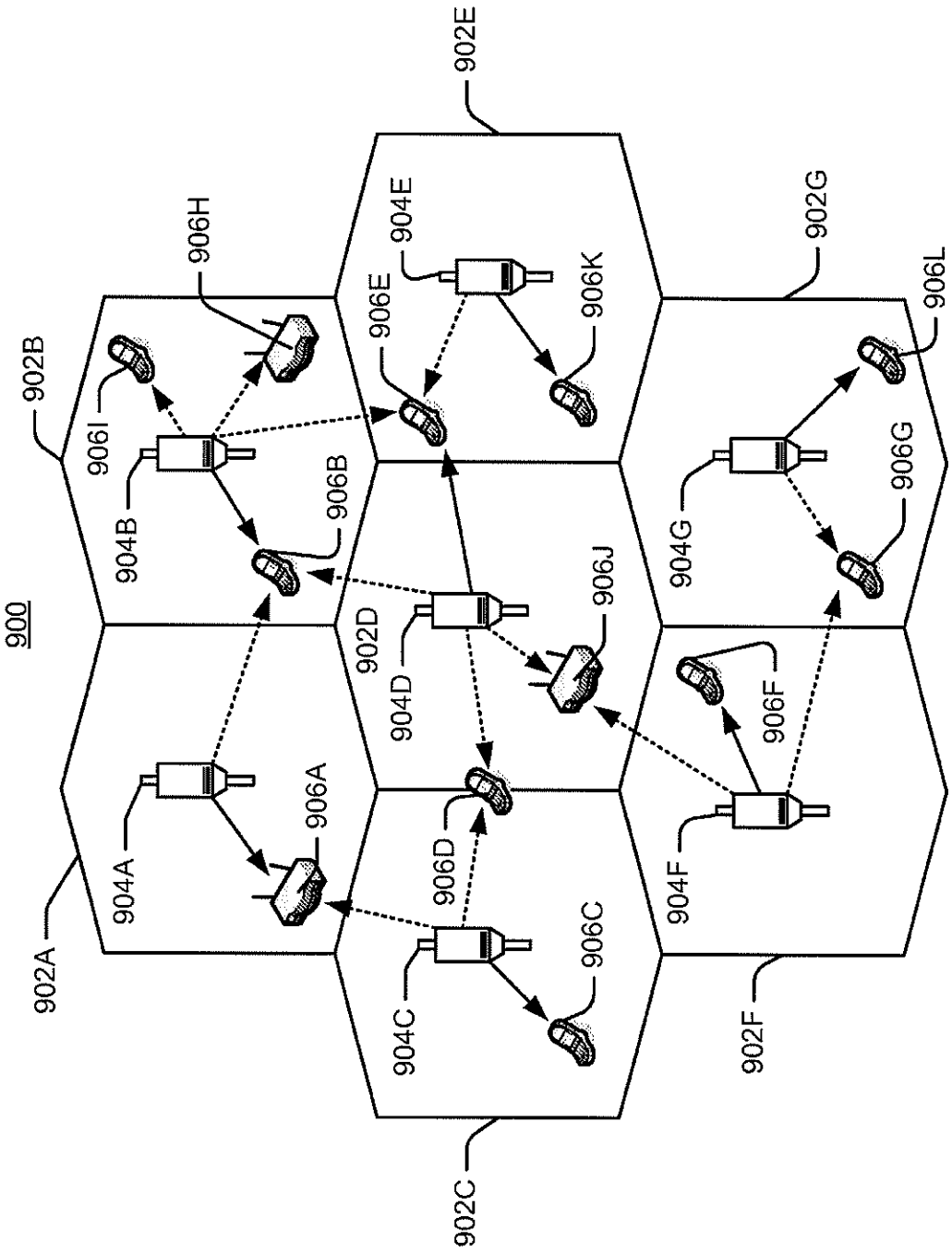

900
902A
902B
902C
902D
902E
902F
902G
904A
904B
904C
904D
904E
904F
904G
906A
906B
906C
906D
906E
906F
906G
906H
906I
906J
906K
906L

FIG. 9

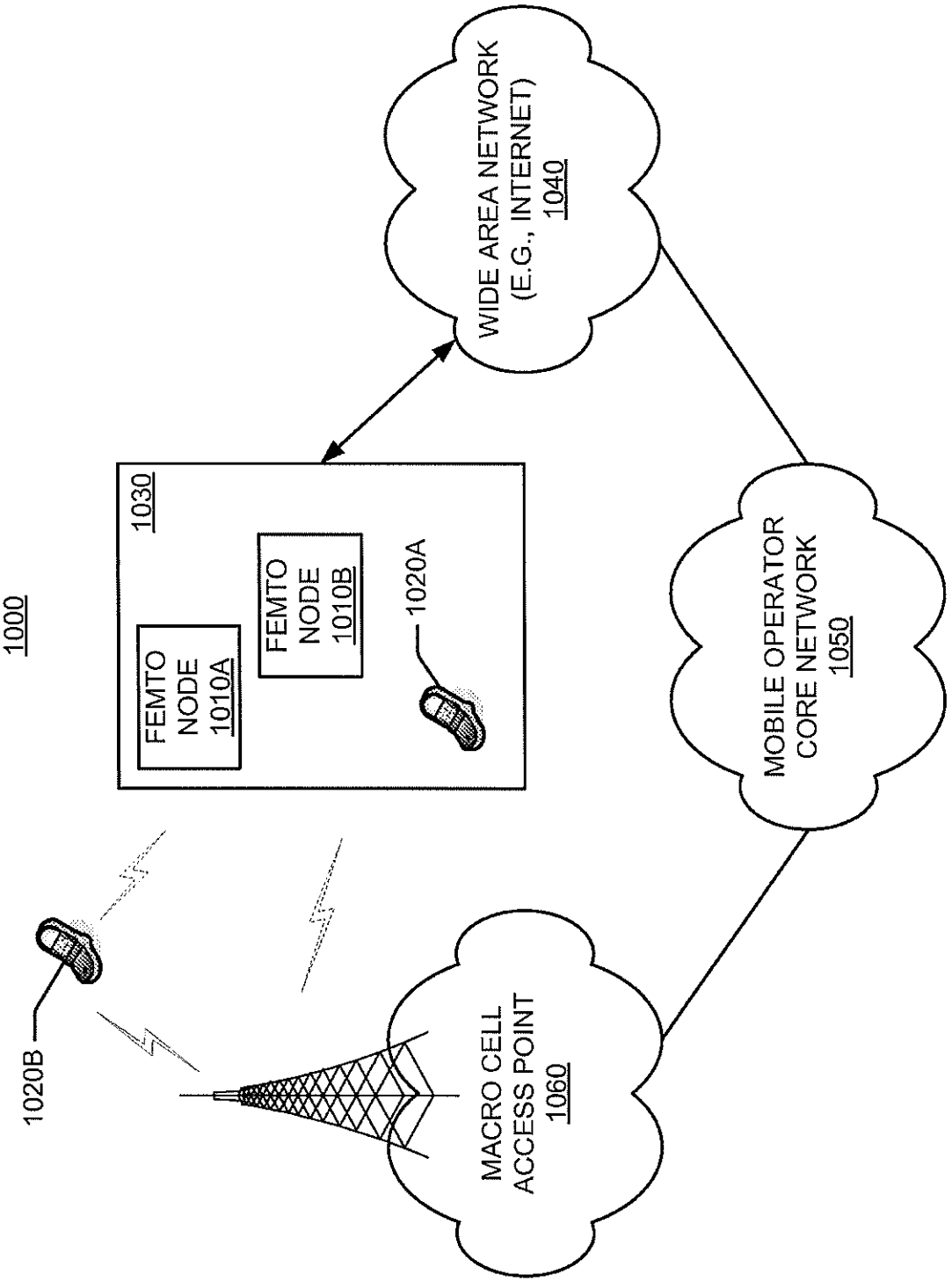

1000
WIDE AREA NETWORK
(E.G., INTERNET)
1040
1030
FEMTO
NODE
1010A
FEMTO
NODE
1010B
1020A
MOBILE OPERATOR
CORE NETWORK
1050
1020B
MACRO CELL
ACCESS POINT
1060

FIG. 10

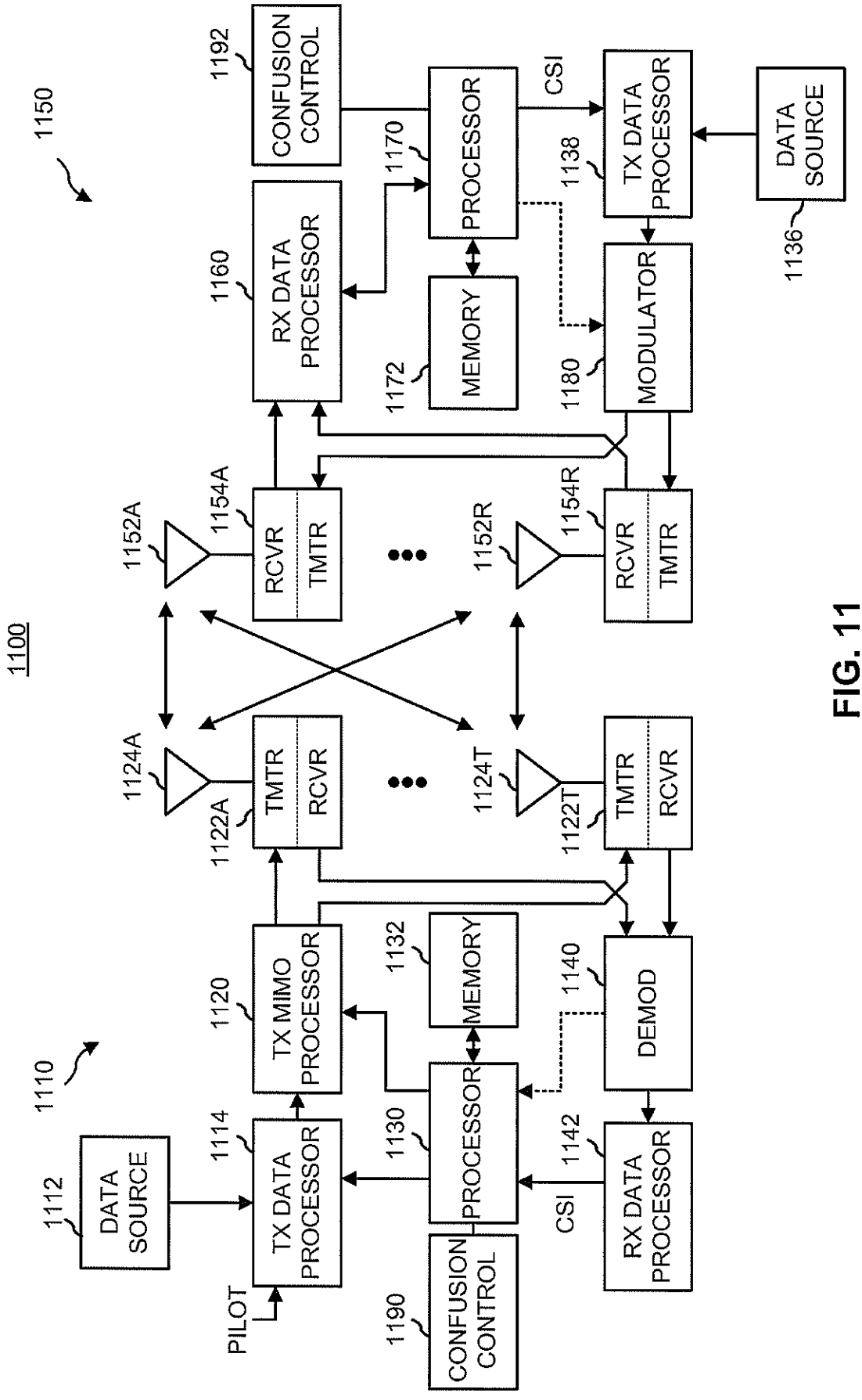

1100
1110
1112
DATA SOURCE
1114
TX DATA PROCESSOR
1120
TX MIMO PROCESSOR
1122A
TMTR
RCVR
1124A
1124T
1122T
1130
PROCESSOR
1132
MEMORY
1140
DEMOD
1142
RX DATA PROCESSOR
CSI
PILOT
1190
CONFUSION CONTROL
1150
1152A
1152R
1154A
1154R
RCVR
TMTR
1160
RX DATA PROCESSOR
1170
PROCESSOR
1172
MEMORY
1180
MODULATOR
1138
TX DATA PROCESSOR
CSI
1136
DATA SOURCE
1192
CONFUSION CONTROL

FIG. 11

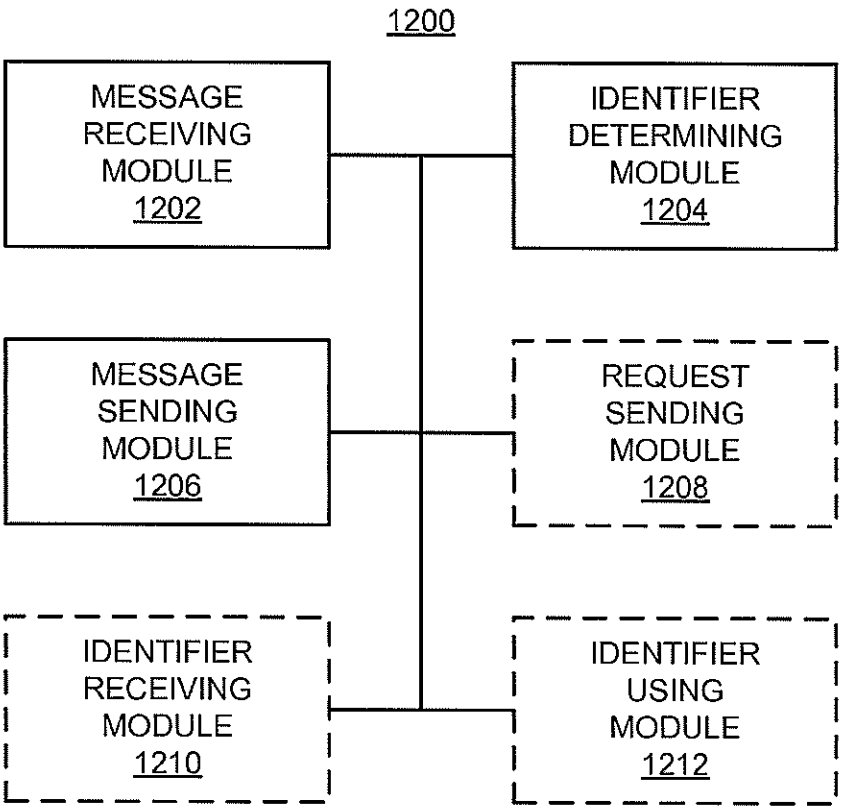

1200
MESSAGE RECEIVING MODULE 1202
IDENTIFIER DETERMINING MODULE 1204
MESSAGE SENDING MODULE 1206
REQUEST SENDING MODULE 1208
IDENTIFIER RECEIVING MODULE 1210
IDENTIFIER USING MODULE 1212

FIG. 12

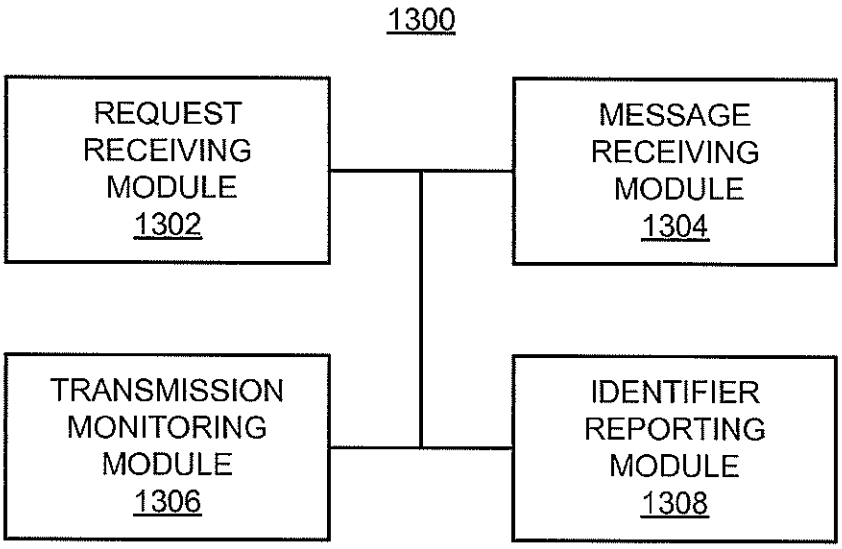

1300
REQUEST RECEIVING MODULE 1302
MESSAGE RECEIVING MODULE 1304
TRANSMISSION MONITORING MODULE 1306
IDENTIFIER REPORTING MODULE 1308

FIG. 13

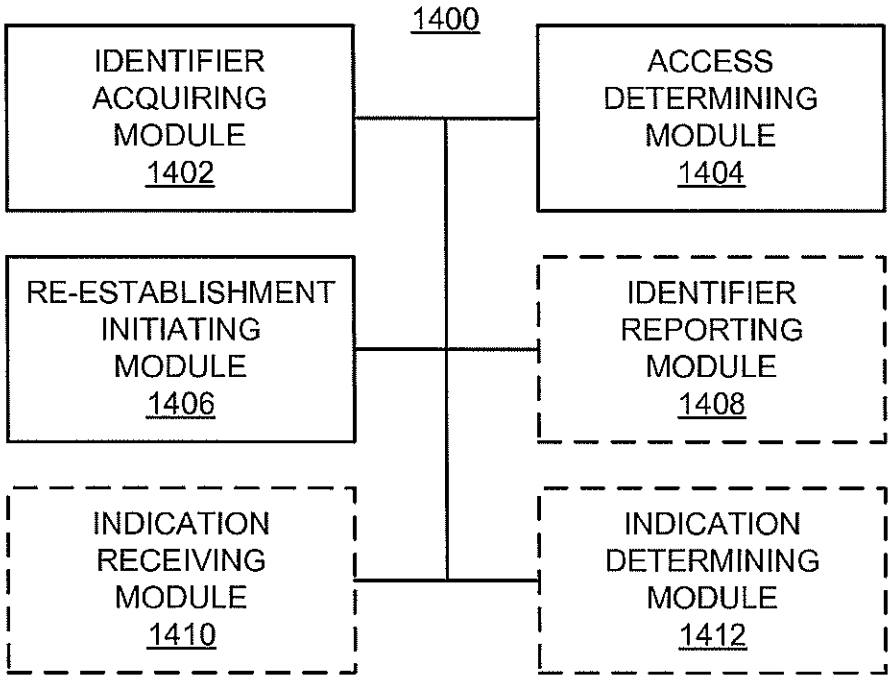

1400
IDENTIFIER ACQUIRING MODULE 1402
ACCESS DETERMINING MODULE 1404
RE-ESTABLISHMENT INITIATING MODULE 1406
IDENTIFIER REPORTING MODULE 1408
INDICATION RECEIVING MODULE 1410
INDICATION DETERMINING MODULE 1412

FIG. 14

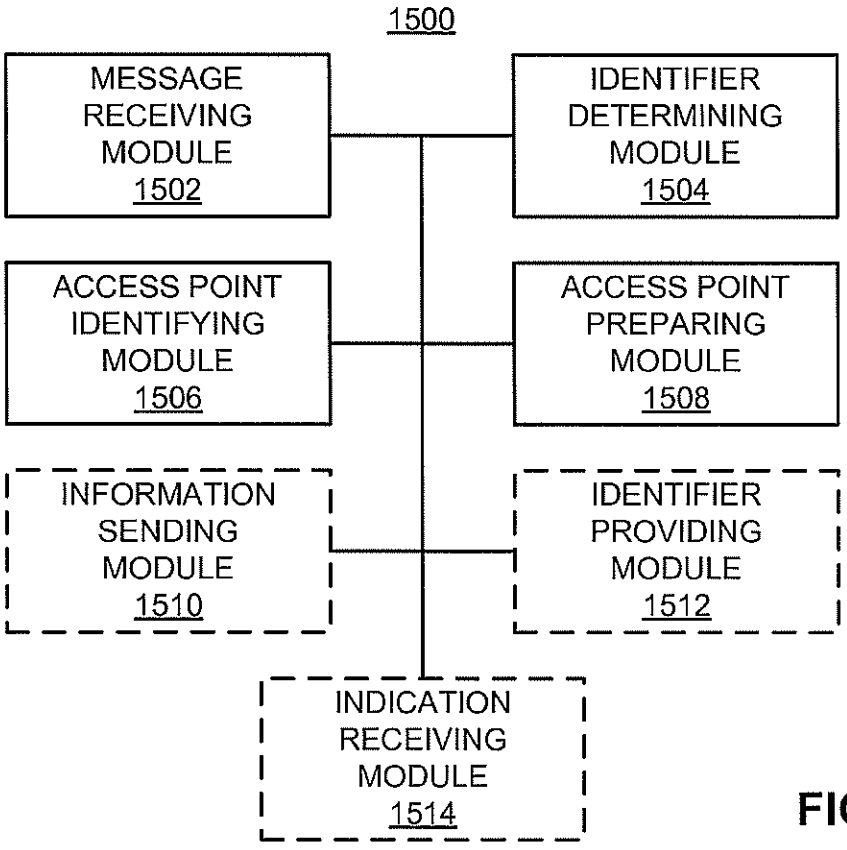

1500
MESSAGE RECEIVING MODULE 1502
IDENTIFIER DETERMINING MODULE 1504
ACCESS POINT IDENTIFYING MODULE 1506
ACCESS POINT PREPARING MODULE 1508
INFORMATION SENDING MODULE 1510
IDENTIFIER PROVIDING MODULE 1512
INDICATION RECEIVING MODULE 1514

FIG. 15

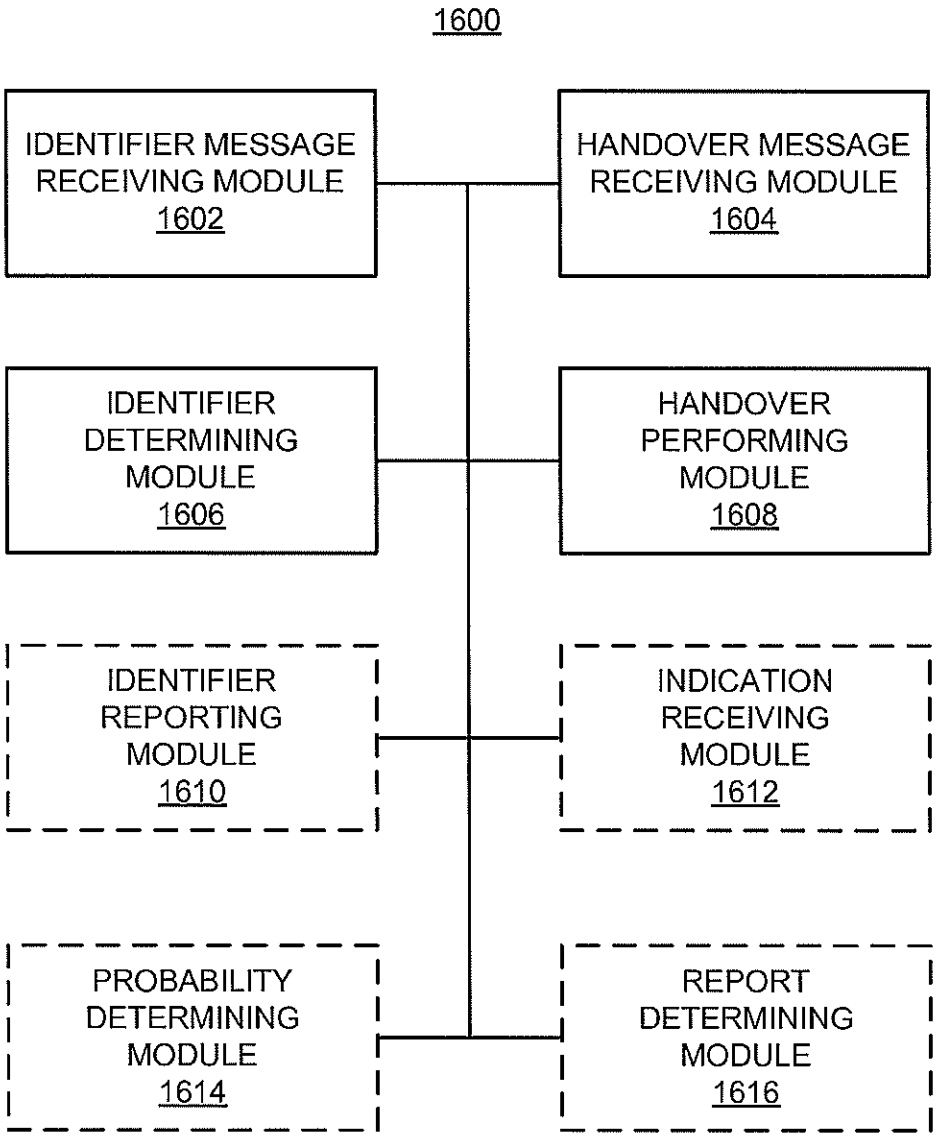

1600
IDENTIFIER MESSAGE RECEIVING MODULE 1602
HANDOVER MESSAGE RECEIVING MODULE 1604
IDENTIFIER DETERMINING MODULE 1606
HANDOVER PERFORMING MODULE 1608
IDENTIFIER REPORTING MODULE 1610
INDICATION RECEIVING MODULE 1612
PROBABILITY DETERMINING MODULE 1614
REPORT DETERMINING MODULE 1616

FIG. 16