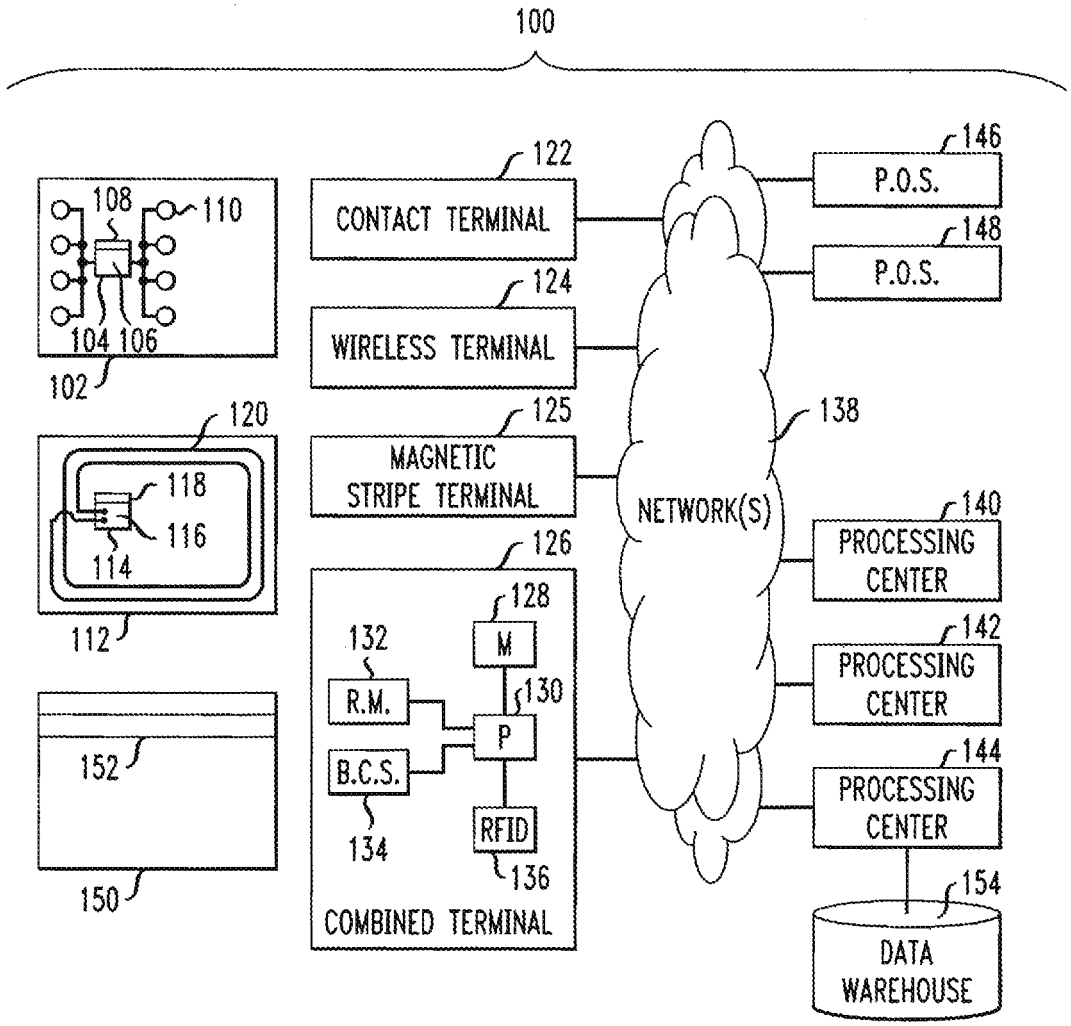
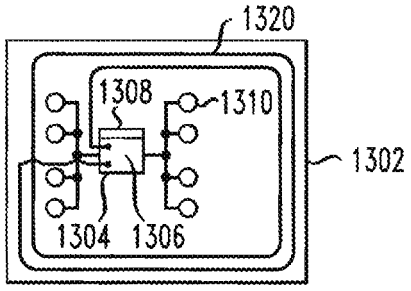
FIG. 1


100
108
110
104 106
102
120
118
116
114
112
152
150
122
CONTACT TERMINAL
124
WIRELESS TERMINAL
125
MAGNETIC STRIPE TERMINAL
126
128
M
132
R.M.
130
P
B.C.S.
134
RFID
136
COMBINED TERMINAL
138
NETWORK(S)
146
P.O.S.
148
P.O.S.
140
PROCESSING CENTER
142
PROCESSING CENTER
144
PROCESSING CENTER
154
DATA WAREHOUSE


1320
1308
1310
1302
1304
1306

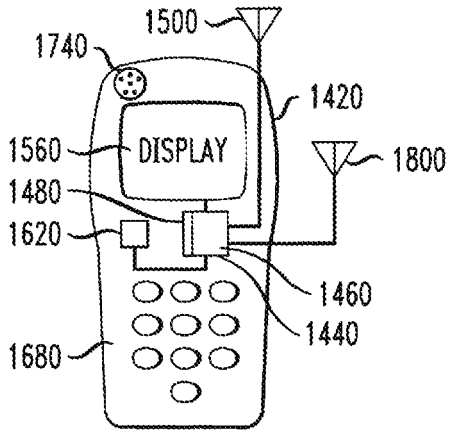

1500
1740
1420
1560
DISPLAY
1800
1480
1620
1460
1440
1680

FIG. 2

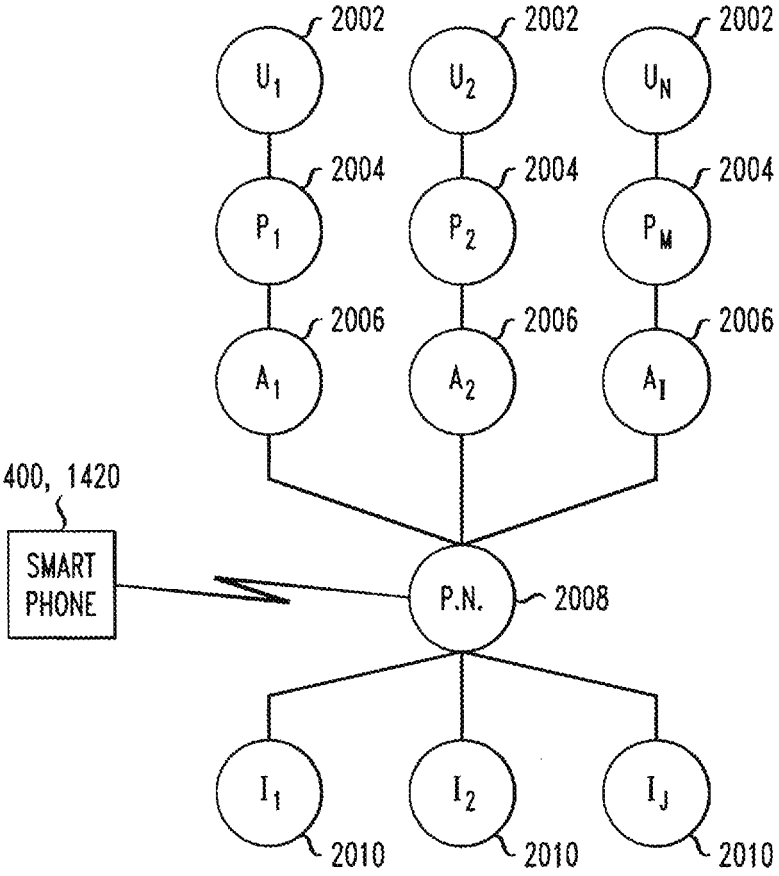
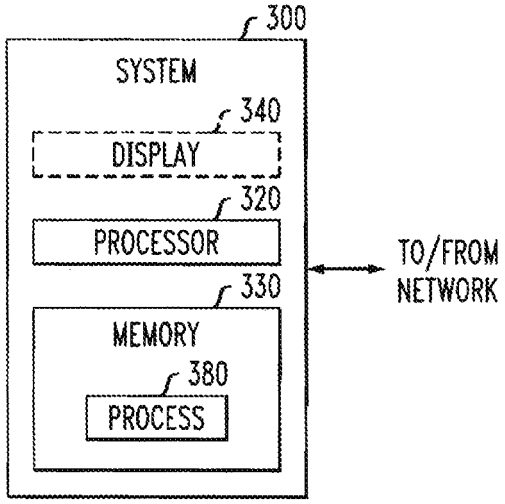

2002
2002
2002
U1
U2
UN
2004
2004
2004
P1
P2
PM
2006
2006
2006
A1
A2
AI
400, 1420
SMART PHONE
P.N.
2008
I1
I2
IJ
2010
2010
2010

FIG. 3


300
SYSTEM
340
DISPLAY
320
PROCESSOR
330
MEMORY
380
PROCESS
TO/FROM NETWORK

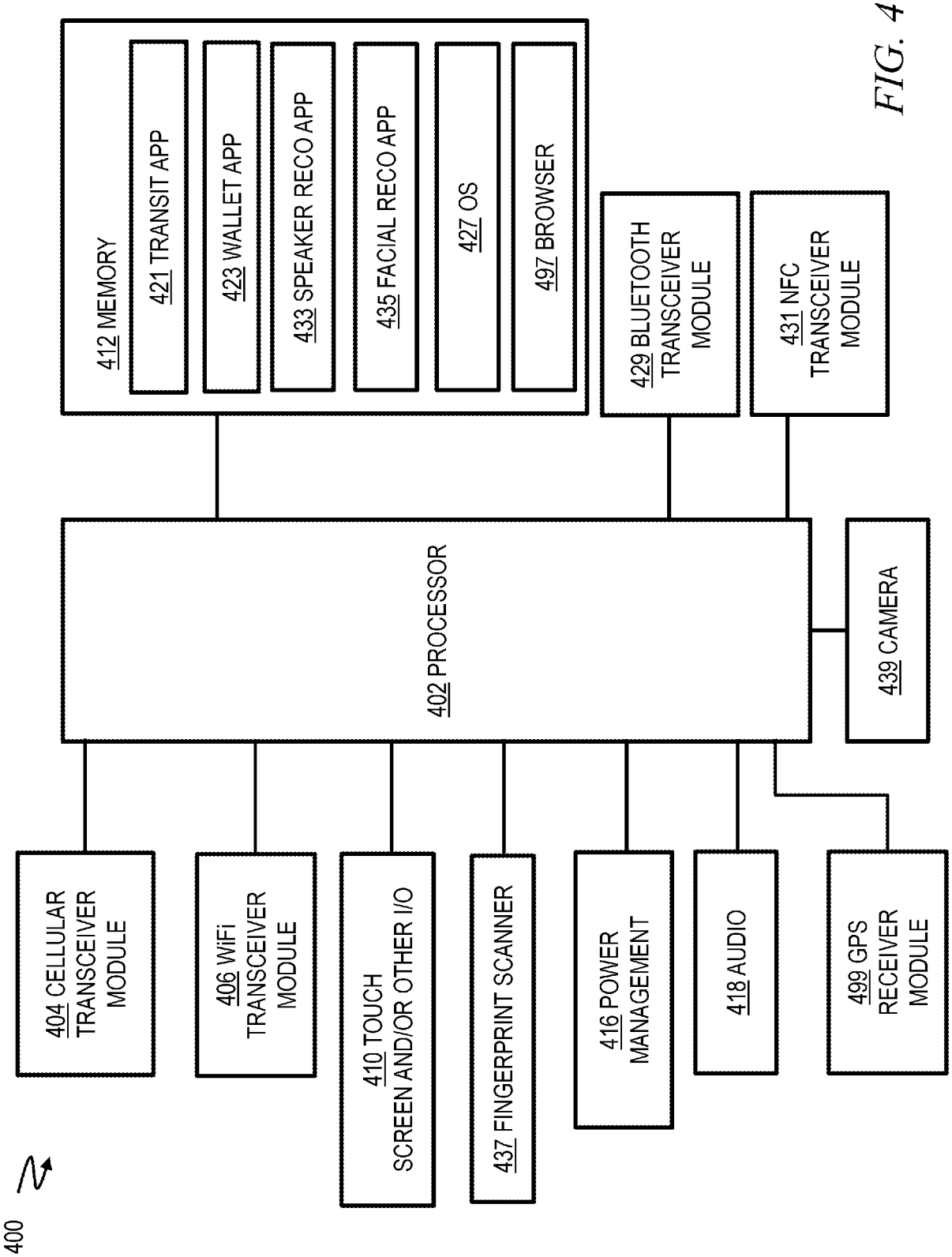

400
412 MEMORY
421 TRANSIT APP
423 WALLET APP
433 SPEAKER RECO APP
435 FACIAL RECO APP
427 OS
497 BROWSER
429 BLUETOOTH TRANSCEIVER MODULE
431 NFC TRANSCEIVER MODULE
402 PROCESSOR
439 CAMERA
404 CELLULAR TRANSCEIVER MODULE
406 WiFi TRANSCEIVER MODULE
410 TOUCH SCREEN AND/OR OTHER I/O
437 FINGERPRINT SCANNER
416 POWER MANAGEMENT
418 AUDIO
499 GPS RECEIVER MODULE

FIG. 4

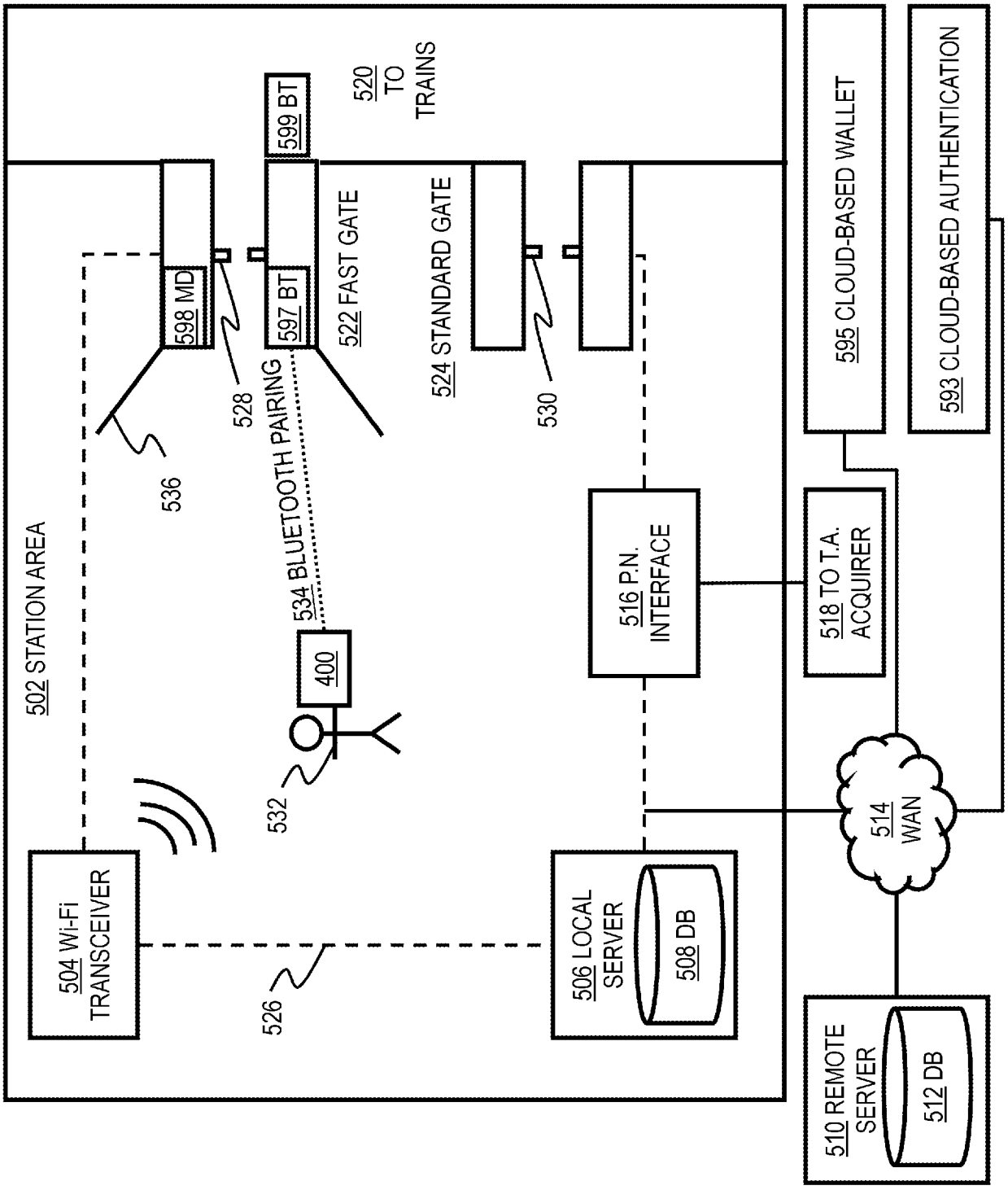
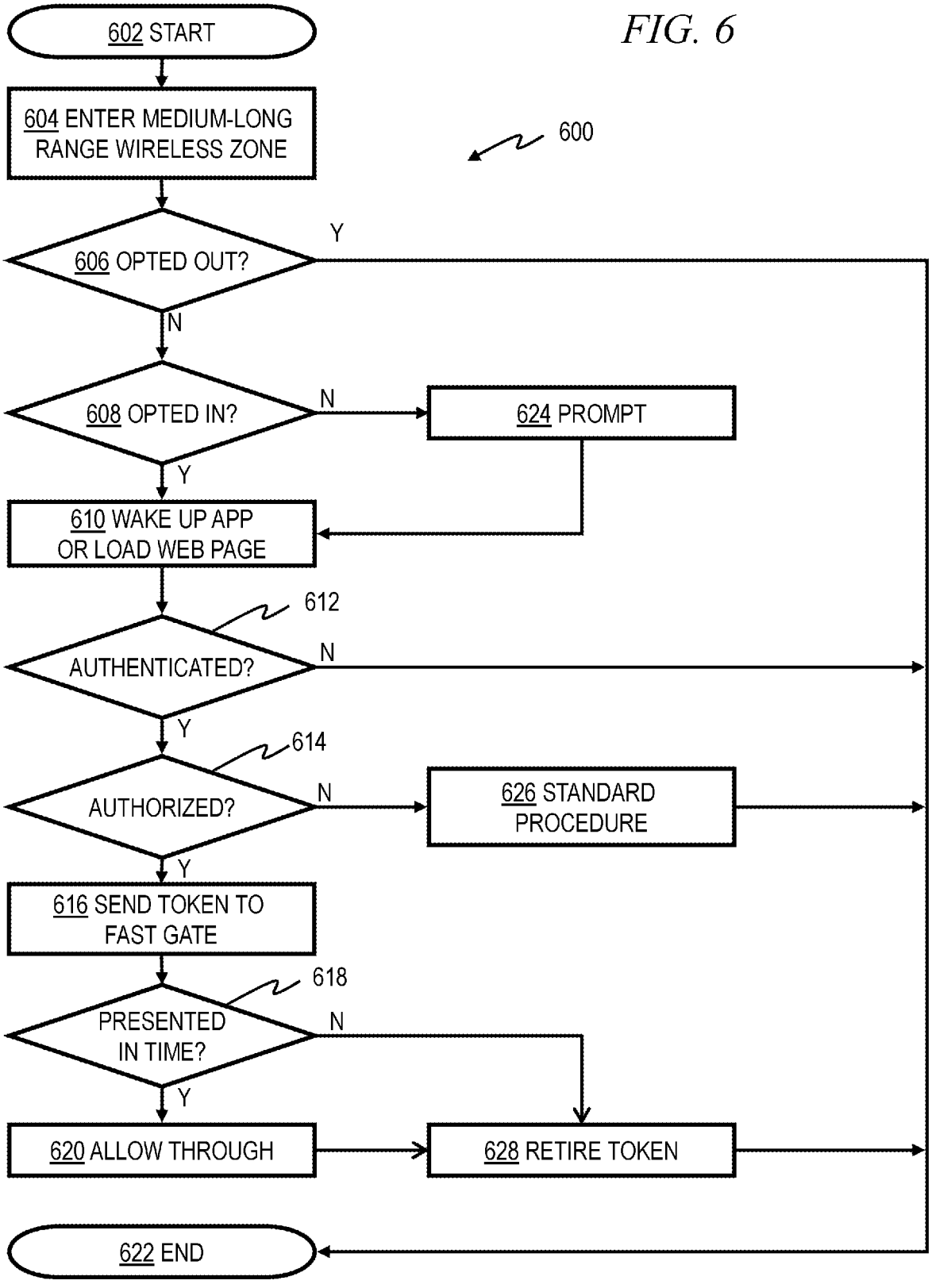

502 STATION AREA
504 Wi-Fi TRANSCEIVER
506 LOCAL SERVER
508 DB
510 REMOTE SERVER
512 DB
514 WAN
516 P.N. INTERFACE
518 TO T.A. ACQUIRER
520 TO TRAINS
522 FAST GATE
524 STANDARD GATE
526
528
530
532
534 BLUETOOTH PAIRING
536
595 CLOUD-BASED WALLET
593 CLOUD-BASED AUTHENTICATION
597 BT
598 MD
599 BT
400

FIG. 5

FIG. 6


602 START
604 ENTER MEDIUM-LONG RANGE WIRELESS ZONE
600
606 OPTED OUT?
Y
N
608 OPTED IN?
N
624 PROMPT
Y
610 WAKE UP APP OR LOAD WEB PAGE
612
AUTHENTICATED?
N
Y
614
AUTHORIZED?
N
626 STANDARD PROCEDURE
Y
616 SEND TOKEN TO FAST GATE
618
PRESENTED IN TIME?
N
Y
620 ALLOW THROUGH
628 RETIRE TOKEN
622 END

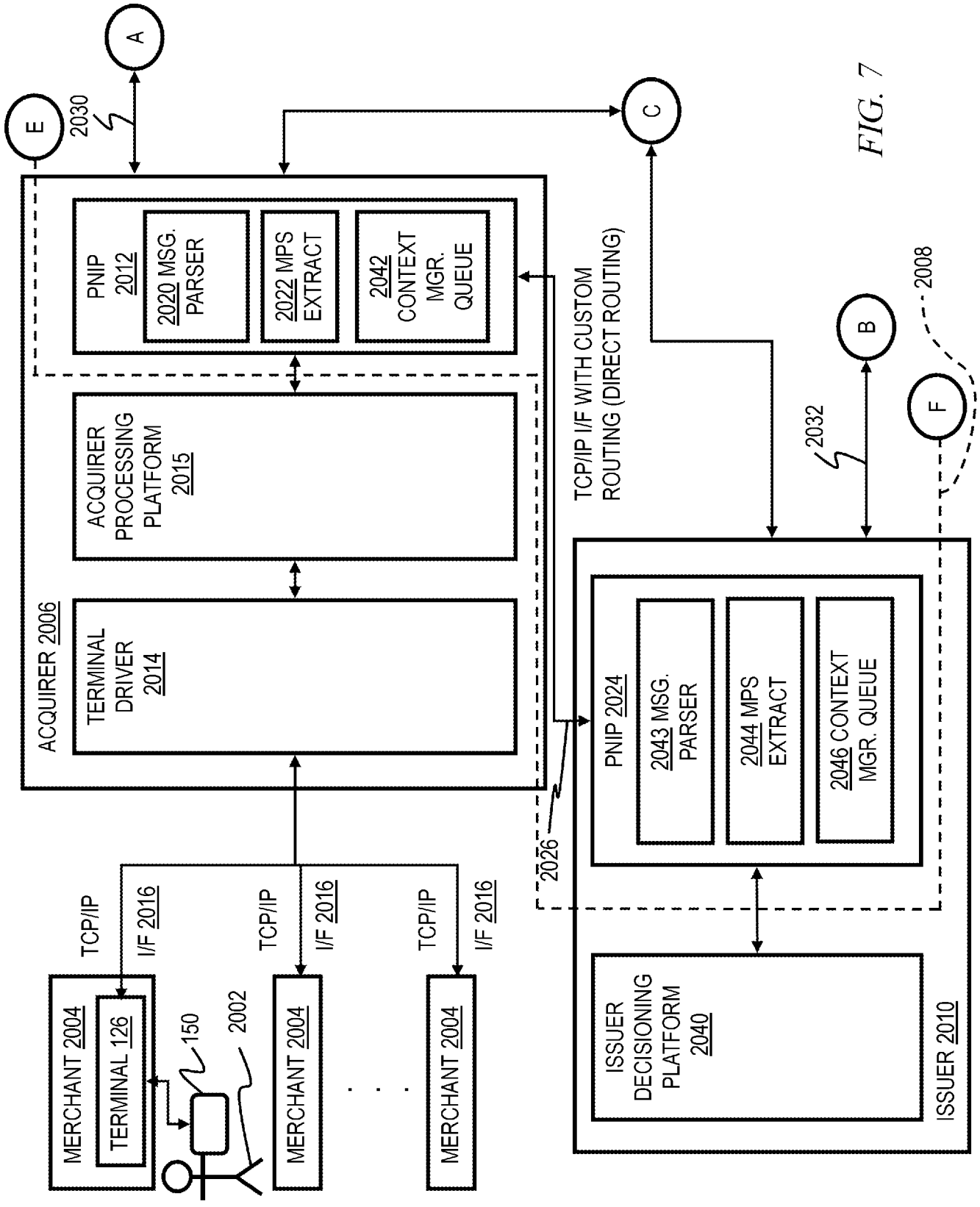

A
E
2030
C
PNIP 2012
2020 MSG. PARSER
2022 MPS EXTRACT
2042 CONTEXT MGR. QUEUE
ACQUIRER PROCESSING PLATFORM 2015
TERMINAL DRIVER 2014
ACQUIRER 2006
TCP/IP I/F WITH CUSTOM ROUTING (DIRECT ROUTING)
B
2008
F
2032
PNIP 2024
2043 MSG. PARSER
2044 MPS EXTRACT
2046 CONTEXT MGR. QUEUE
2026
ISSUER DECISIONING PLATFORM 2040
ISSUER 2010
TCP/IP
I/F 2016
MERCHANT 2004
TERMINAL 126
150
2002
MERCHANT 2004
MERCHANT 2004

FIG. 7

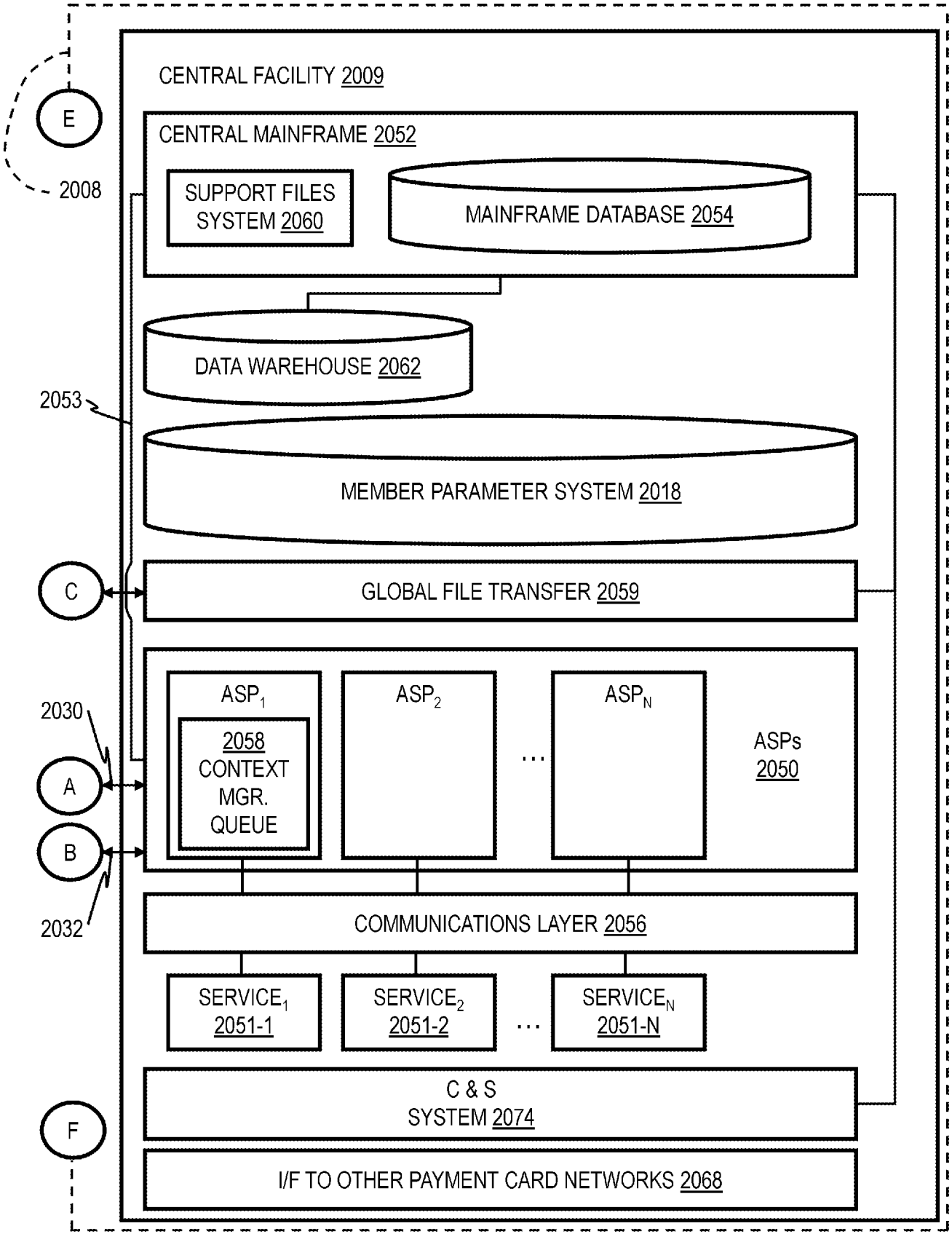

CENTRAL FACILITY 2009
E
2008
CENTRAL MAINFRAME 2052
SUPPORT FILES SYSTEM 2060
MAINFRAME DATABASE 2054
DATA WAREHOUSE 2062
2053
MEMBER PARAMETER SYSTEM 2018
C
GLOBAL FILE TRANSFER 2059
2030
A
B
2032
ASP1
2058 CONTEXT MGR. QUEUE
ASP2
ASPN
ASPs 2050
COMMUNICATIONS LAYER 2056
SERVICE1 2051-1
SERVICE2 2051-2
SERVICEN 2051-N
C & S SYSTEM 2074
F
I/F TO OTHER PAYMENT CARD NETWORKS 2068

FIG. 8

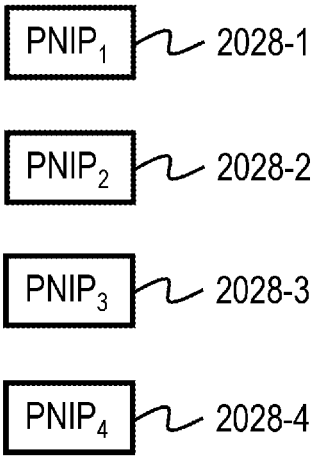

PNIP1
2028-1
PNIP2
2028-2
PNIP3
2028-3
PNIP4
2028-4

FIG. 9

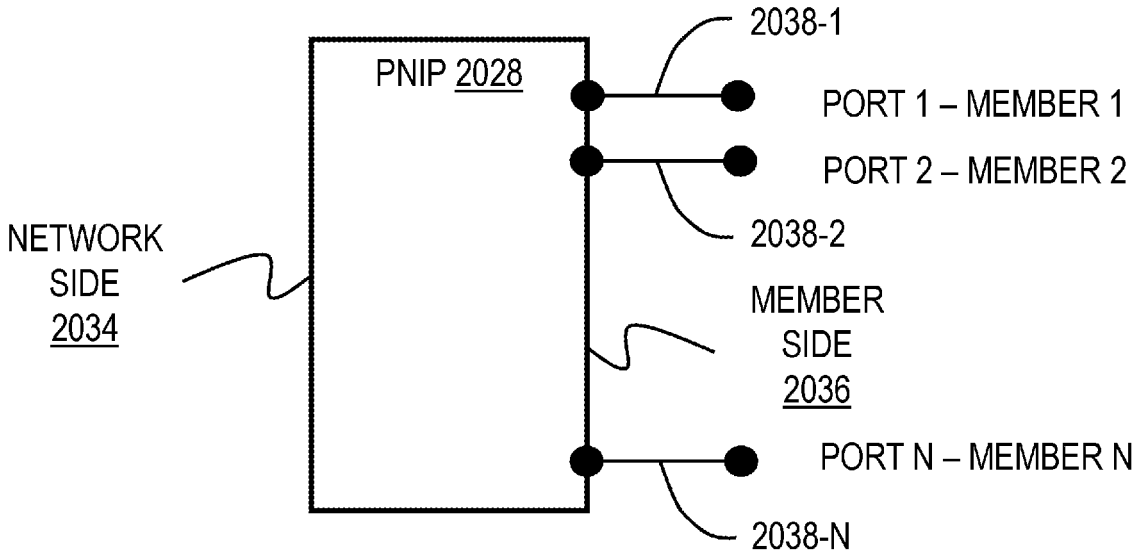

PNIP 2028
2038-1
PORT 1 – MEMBER 1
PORT 2 – MEMBER 2
2038-2
NETWORK SIDE 2034
MEMBER SIDE 2036
PORT N – MEMBER N
2038-N

FIG. 10

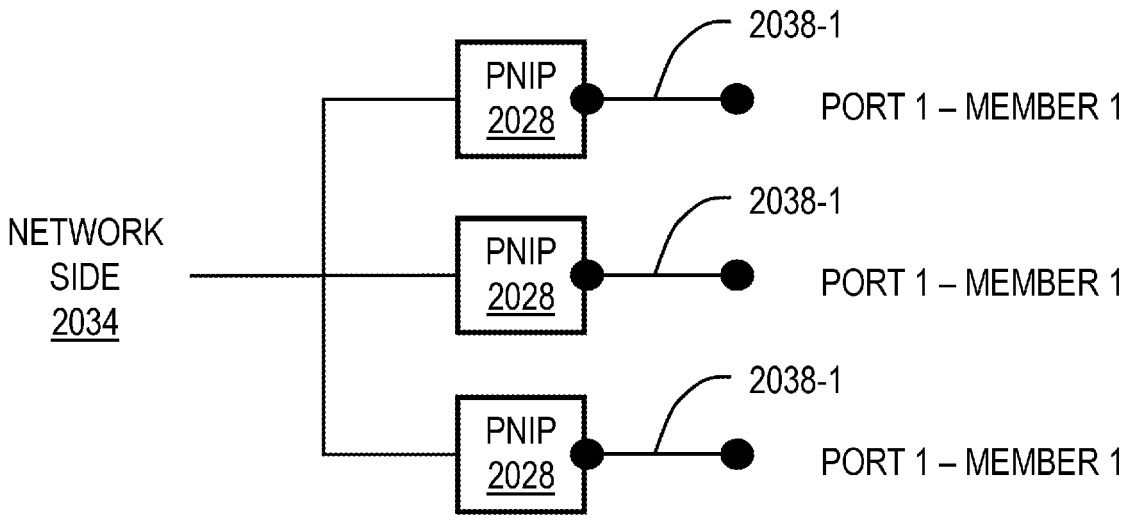

NETWORK
SIDE
2034
PNIP
2028
2038-1
PORT 1 – MEMBER 1
PNIP
2028
2038-1
PORT 1 – MEMBER 1
PNIP
2028
2038-1
PORT 1 – MEMBER 1

FIG. 11

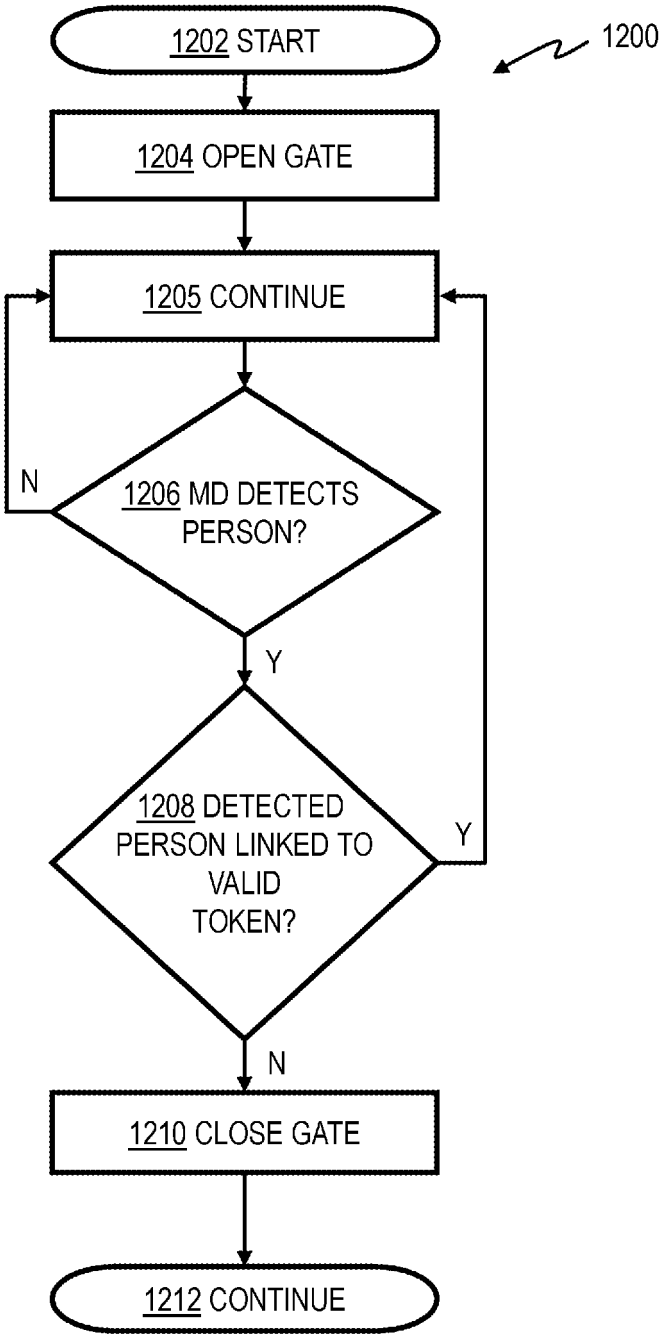

1202 START
1200
1204 OPEN GATE
1205 CONTINUE
N
1206 MD DETECTS PERSON?
Y
1208 DETECTED PERSON LINKED TO VALID TOKEN?
Y
N
1210 CLOSE GATE
1212 CONTINUE

FIG. 12