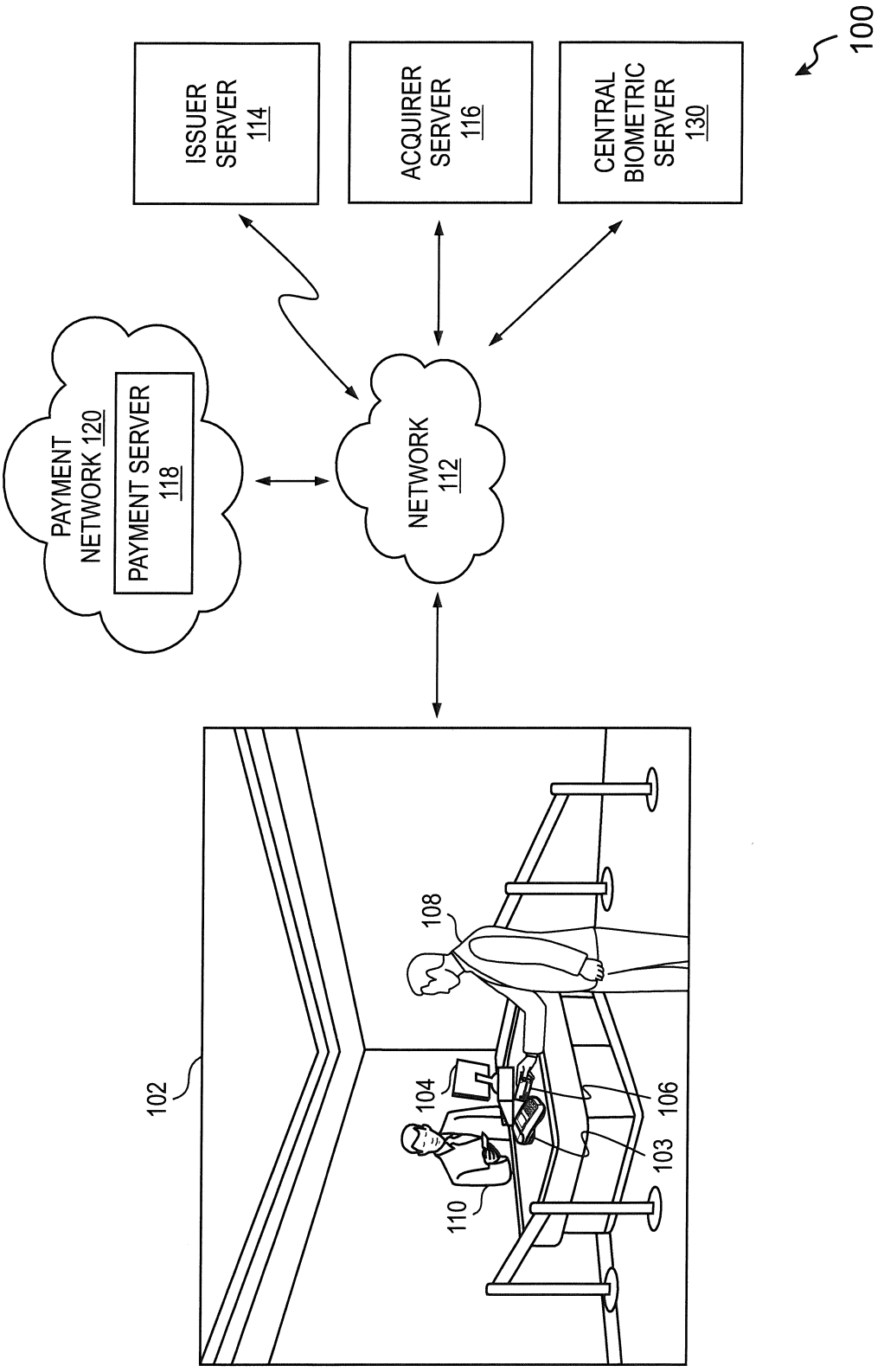

100
ISSUER SERVER 114
ACQUIRER SERVER 116
CENTRAL BIOMETRIC SERVER 130
PAYMENT NETWORK 120
PAYMENT SERVER 118
NETWORK 112
102
104
106
108
110
103

FIG. 1

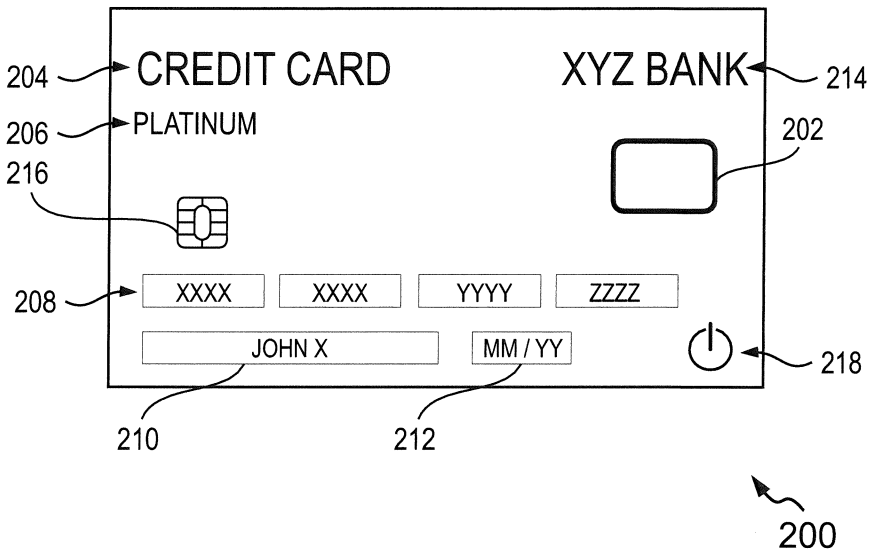

CREDIT CARD
XYZ BANK
PLATINUM
XXXX
XXXX
YYYY
ZZZZ
JOHN X
MM / YY
204
206
216
208
214
202
218
210
212
200

FIG. 2

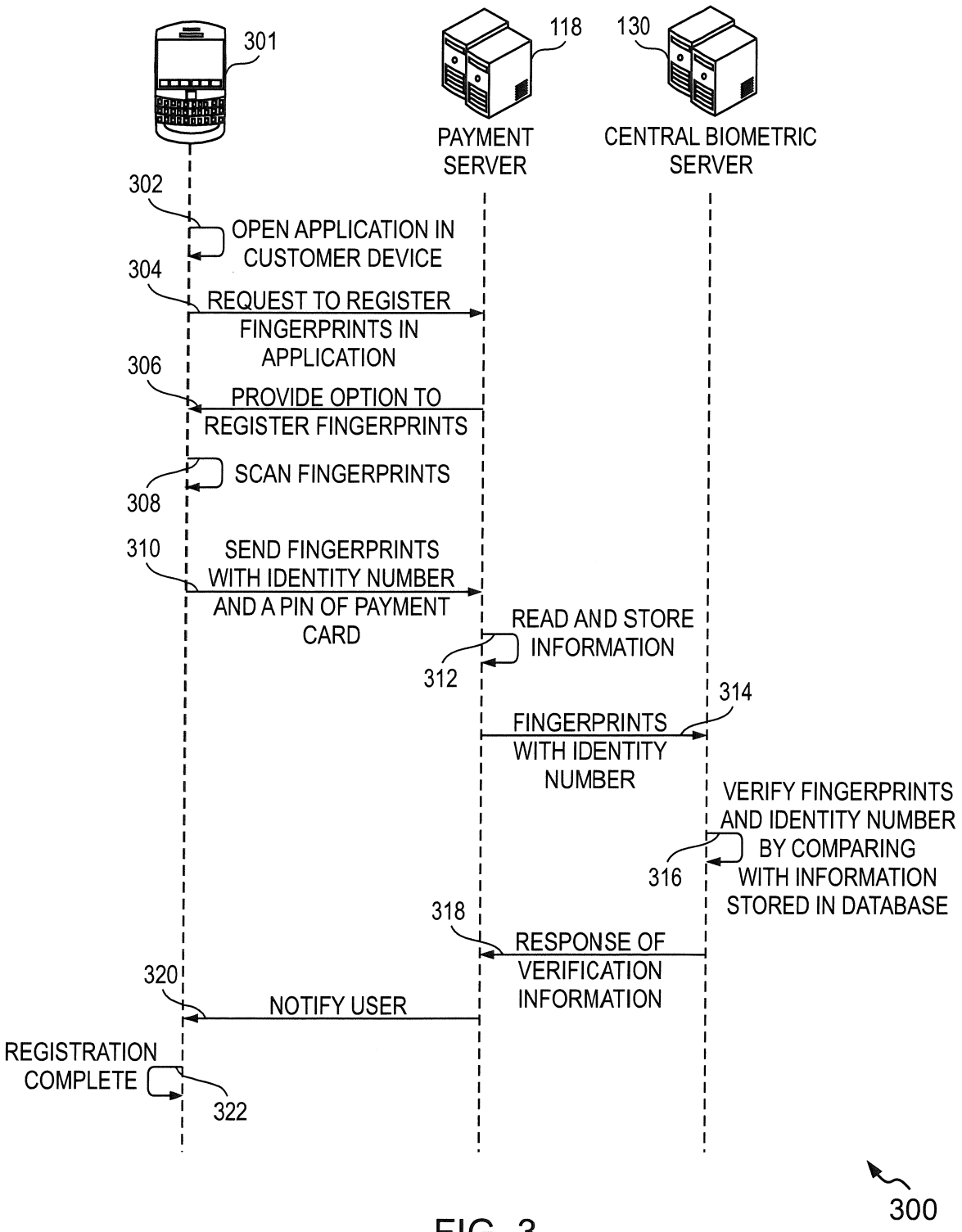

301
118
130
PAYMENT SERVER
CENTRAL BIOMETRIC SERVER
302
OPEN APPLICATION IN CUSTOMER DEVICE
304
REQUEST TO REGISTER FINGERPRINTS IN APPLICATION
306
PROVIDE OPTION TO REGISTER FINGERPRINTS
SCAN FINGERPRINTS
308
310
SEND FINGERPRINTS WITH IDENTITY NUMBER AND A PIN OF PAYMENT CARD
READ AND STORE INFORMATION
312
314
FINGERPRINTS WITH IDENTITY NUMBER
VERIFY FINGERPRINTS AND IDENTITY NUMBER BY COMPARING WITH INFORMATION STORED IN DATABASE
316
318
RESPONSE OF VERIFICATION INFORMATION
320
NOTIFY USER
REGISTRATION COMPLETE
322
300

FIG. 3

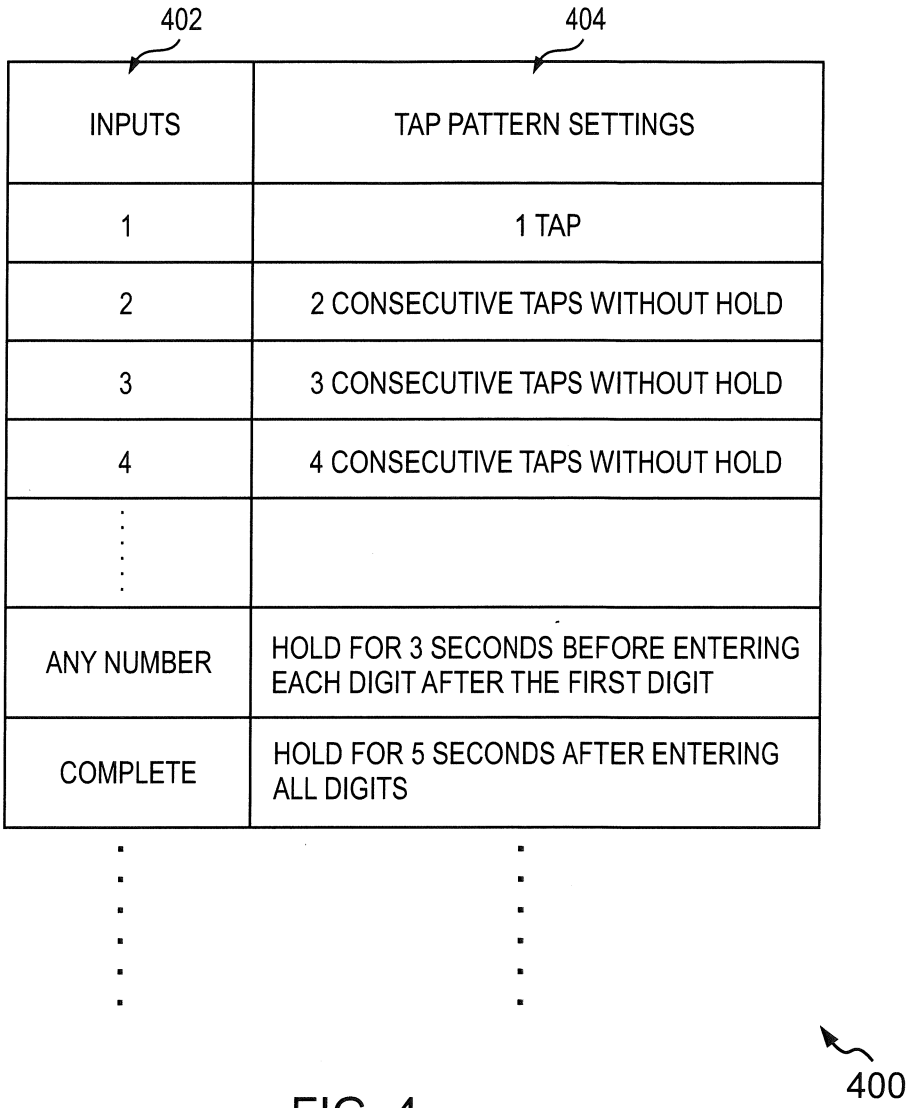

402
404
INPUTS
TAP PATTERN SETTINGS
1
1 TAP
2
2 CONSECUTIVE TAPS WITHOUT HOLD
3
3 CONSECUTIVE TAPS WITHOUT HOLD
4
4 CONSECUTIVE TAPS WITHOUT HOLD
ANY NUMBER
HOLD FOR 3 SECONDS BEFORE ENTERING EACH DIGIT AFTER THE FIRST DIGIT
COMPLETE
HOLD FOR 5 SECONDS AFTER ENTERING ALL DIGITS
400

FIG. 4

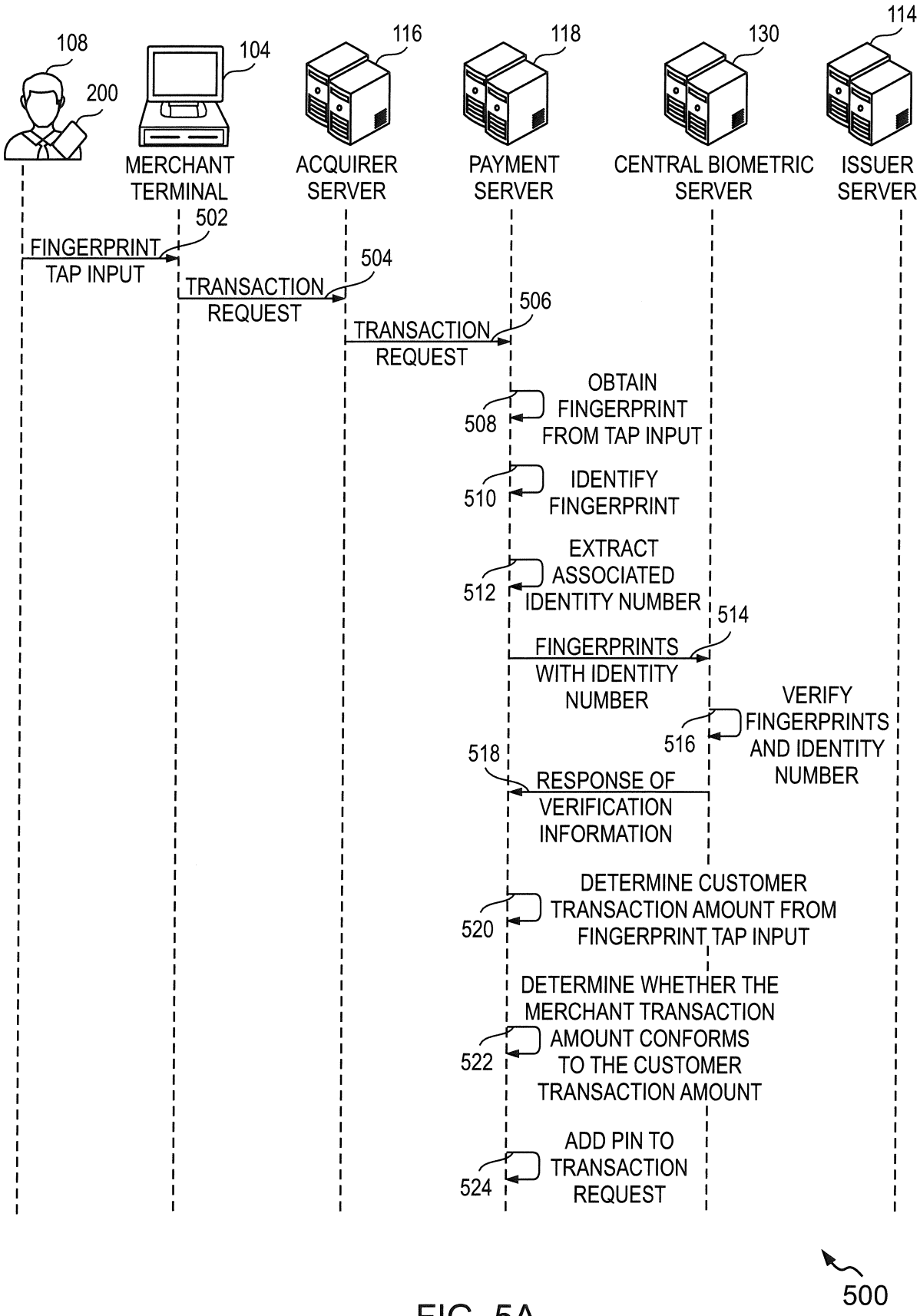

108
200
104
116
118
130
114
MERCHANT TERMINAL
ACQUIRER SERVER
PAYMENT SERVER
CENTRAL BIOMETRIC SERVER
ISSUER SERVER
502
FINGERPRINT TAP INPUT
504
TRANSACTION REQUEST
506
TRANSACTION REQUEST
508
OBTAIN FINGERPRINT FROM TAP INPUT
510
IDENTIFY FINGERPRINT
512
EXTRACT ASSOCIATED IDENTITY NUMBER
514
FINGERPRINTS WITH IDENTITY NUMBER
516
VERIFY FINGERPRINTS AND IDENTITY NUMBER
518
RESPONSE OF VERIFICATION INFORMATION
520
DETERMINE CUSTOMER TRANSACTION AMOUNT FROM FINGERPRINT TAP INPUT
522
DETERMINE WHETHER THE MERCHANT TRANSACTION AMOUNT CONFORMS TO THE CUSTOMER TRANSACTION AMOUNT
524
ADD PIN TO TRANSACTION REQUEST
500

FIG. 5A

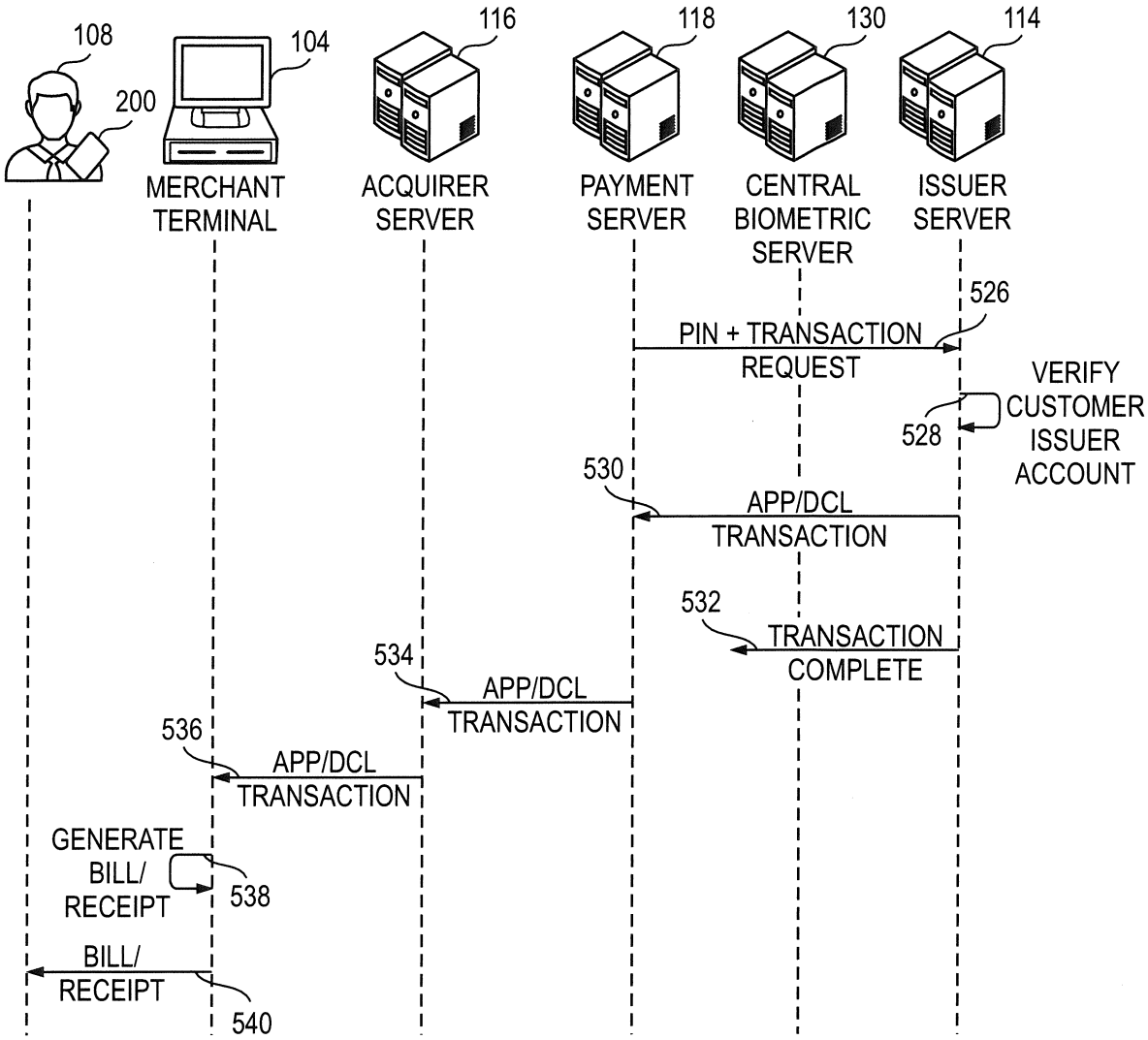

108
200
104
MERCHANT TERMINAL
116
ACQUIRER SERVER
118
PAYMENT SERVER
130
CENTRAL BIOMETRIC SERVER
114
ISSUER SERVER
526
PIN + TRANSACTION REQUEST
VERIFY CUSTOMER ISSUER ACCOUNT
528
530
APP/DCL TRANSACTION
532
TRANSACTION COMPLETE
534
APP/DCL TRANSACTION
536
APP/DCL TRANSACTION
GENERATE BILL/ RECEIPT
538
BILL/ RECEIPT
540
500

FIG. 5B

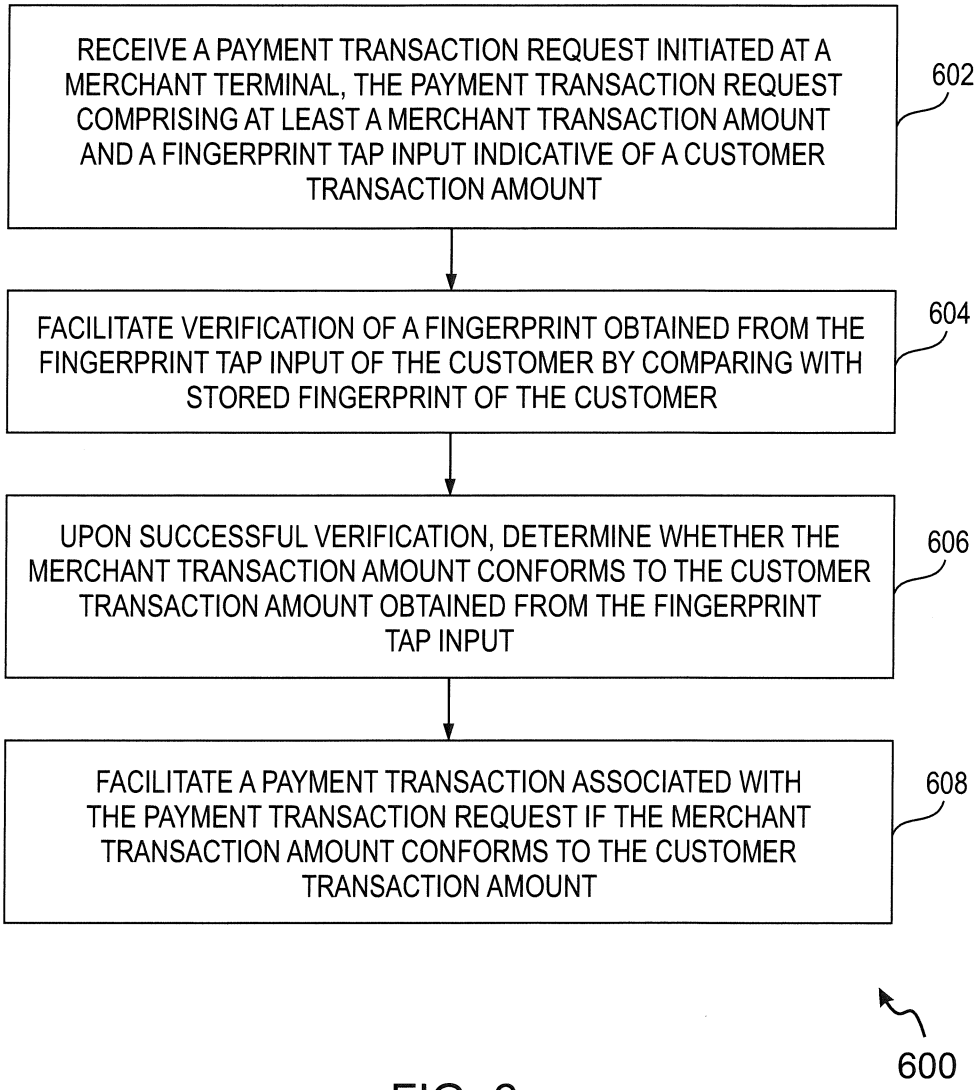

RECEIVE A PAYMENT TRANSACTION REQUEST INITIATED AT A MERCHANT TERMINAL, THE PAYMENT TRANSACTION REQUEST COMPRISING AT LEAST A MERCHANT TRANSACTION AMOUNT AND A FINGERPRINT TAP INPUT INDICATIVE OF A CUSTOMER TRANSACTION AMOUNT
602
FACILITATE VERIFICATION OF A FINGERPRINT OBTAINED FROM THE FINGERPRINT TAP INPUT OF THE CUSTOMER BY COMPARING WITH STORED FINGERPRINT OF THE CUSTOMER
604
UPON SUCCESSFUL VERIFICATION, DETERMINE WHETHER THE MERCHANT TRANSACTION AMOUNT CONFORMS TO THE CUSTOMER TRANSACTION AMOUNT OBTAINED FROM THE FINGERPRINT TAP INPUT
606
FACILITATE A PAYMENT TRANSACTION ASSOCIATED WITH THE PAYMENT TRANSACTION REQUEST IF THE MERCHANT TRANSACTION AMOUNT CONFORMS TO THE CUSTOMER TRANSACTION AMOUNT
608
600

FIG. 6

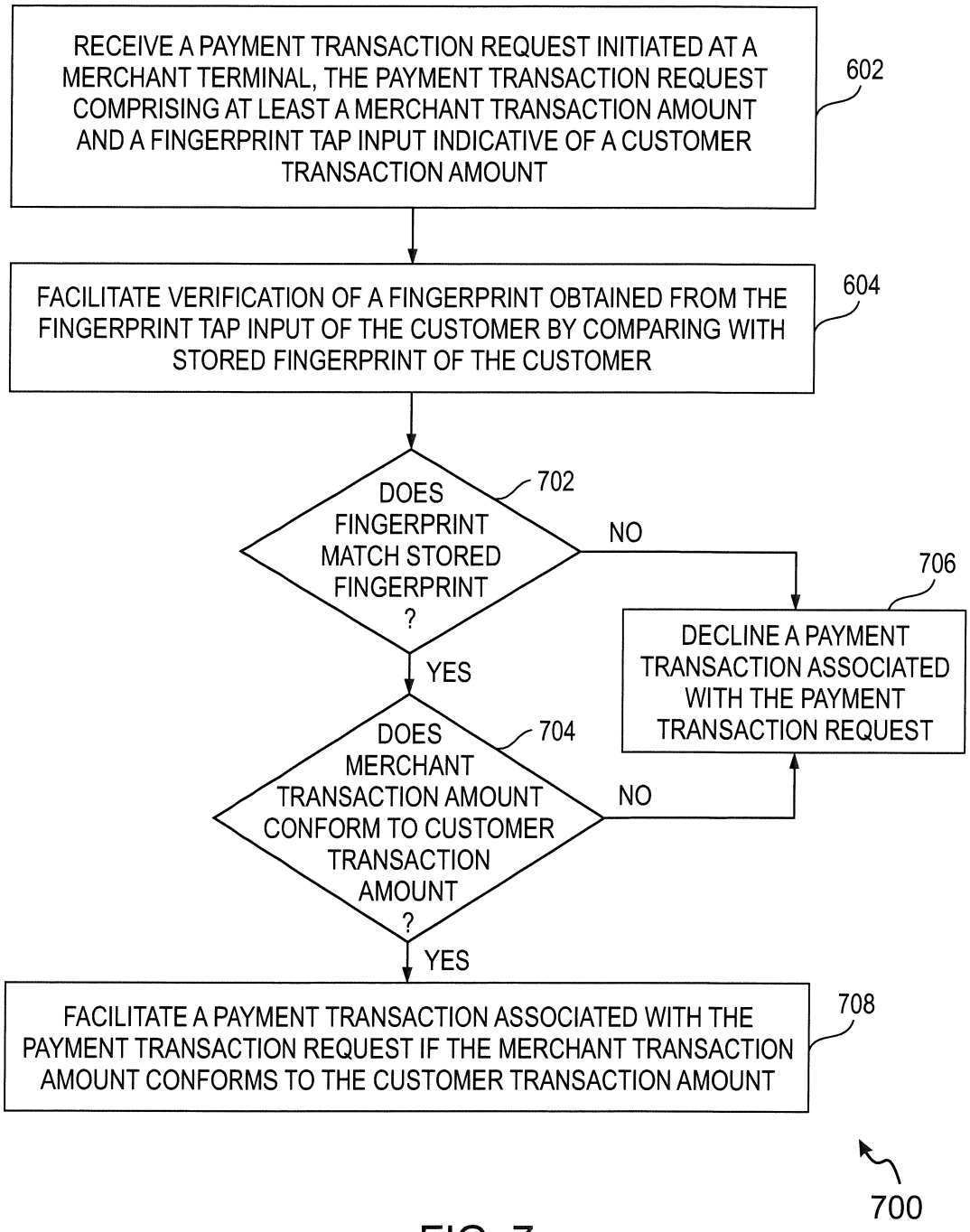

RECEIVE A PAYMENT TRANSACTION REQUEST INITIATED AT A MERCHANT TERMINAL, THE PAYMENT TRANSACTION REQUEST COMPRISING AT LEAST A MERCHANT TRANSACTION AMOUNT AND A FINGERPRINT TAP INPUT INDICATIVE OF A CUSTOMER TRANSACTION AMOUNT
602
FACILITATE VERIFICATION OF A FINGERPRINT OBTAINED FROM THE FINGERPRINT TAP INPUT OF THE CUSTOMER BY COMPARING WITH STORED FINGERPRINT OF THE CUSTOMER
604
DOES FINGERPRINT MATCH STORED FINGERPRINT ?
702
NO
YES
DECLINE A PAYMENT TRANSACTION ASSOCIATED WITH THE PAYMENT TRANSACTION REQUEST
706
DOES MERCHANT TRANSACTION AMOUNT CONFORM TO CUSTOMER TRANSACTION AMOUNT ?
704
NO
YES
FACILITATE A PAYMENT TRANSACTION ASSOCIATED WITH THE PAYMENT TRANSACTION REQUEST IF THE MERCHANT TRANSACTION AMOUNT CONFORMS TO THE CUSTOMER TRANSACTION AMOUNT
708
700

FIG. 7

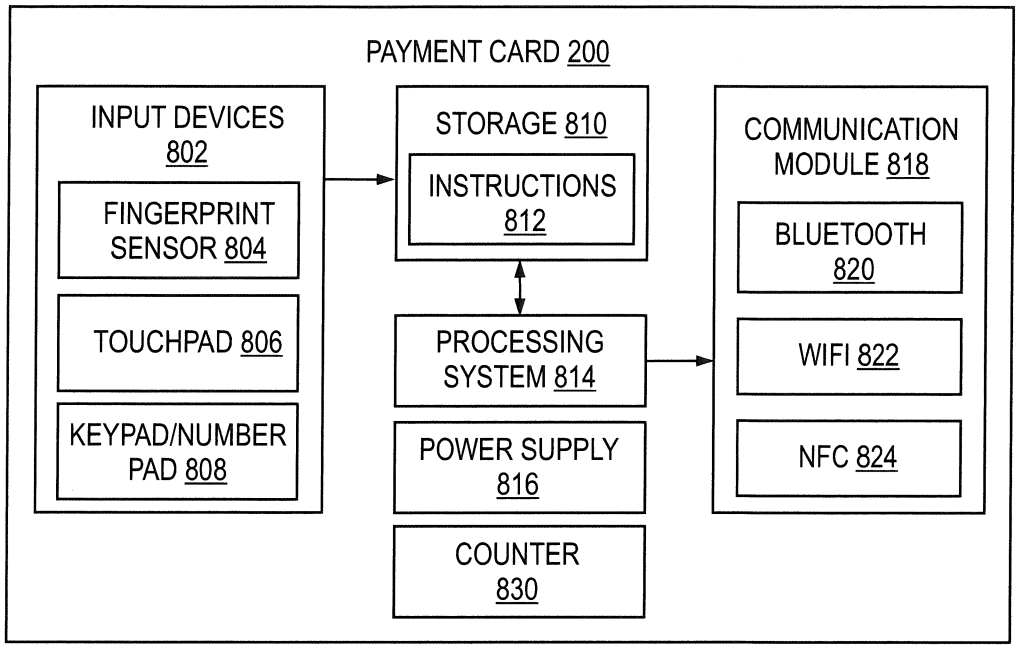

PAYMENT CARD 200
INPUT DEVICES 802
FINGERPRINT SENSOR 804
TOUCHPAD 806
KEYPAD/NUMBER PAD 808
STORAGE 810
INSTRUCTIONS 812
PROCESSING SYSTEM 814
POWER SUPPLY 816
COUNTER 830
COMMUNICATION MODULE 818
BLUETOOTH 820
WIFI 822
NFC 824
800

FIG. 8

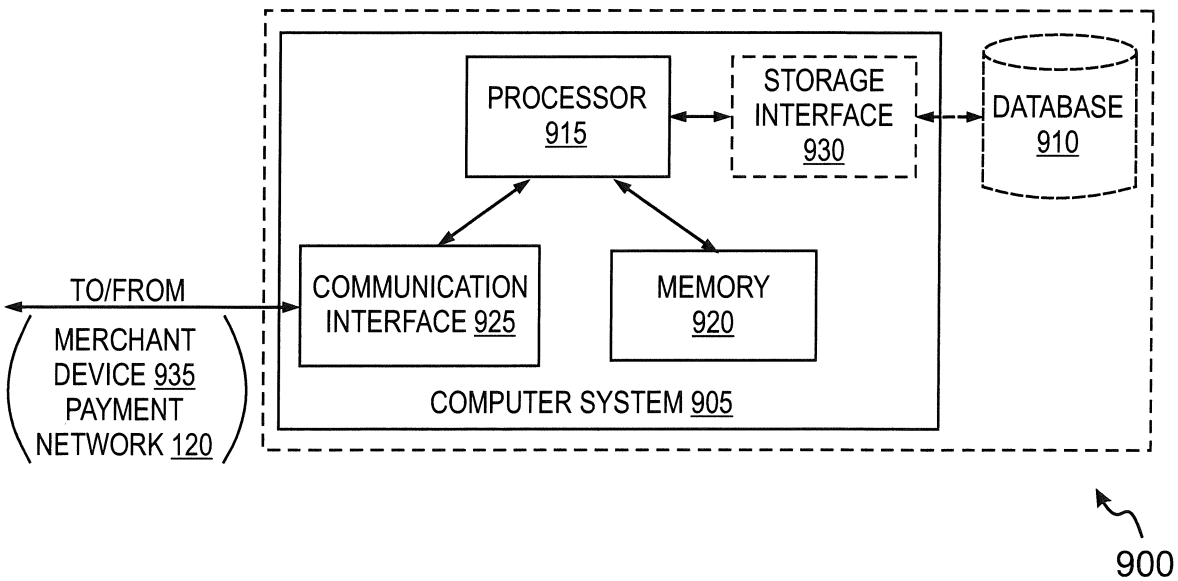

PROCESSOR 915
STORAGE INTERFACE 930
DATABASE 910
COMMUNICATION INTERFACE 925
MEMORY 920
COMPUTER SYSTEM 905
TO/FROM
MERCHANT DEVICE 935
PAYMENT NETWORK 120
900

FIG. 9

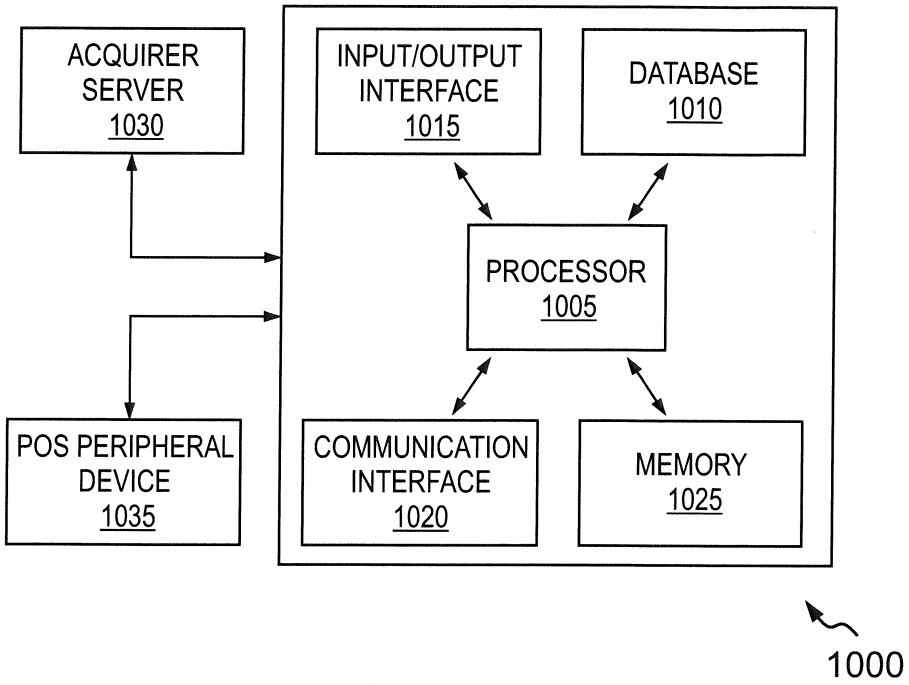

ACQUIRER SERVER 1030
INPUT/OUTPUT INTERFACE 1015
DATABASE 1010
PROCESSOR 1005
POS PERIPHERAL DEVICE 1035
COMMUNICATION INTERFACE 1020
MEMORY 1025
1000

FIG. 10

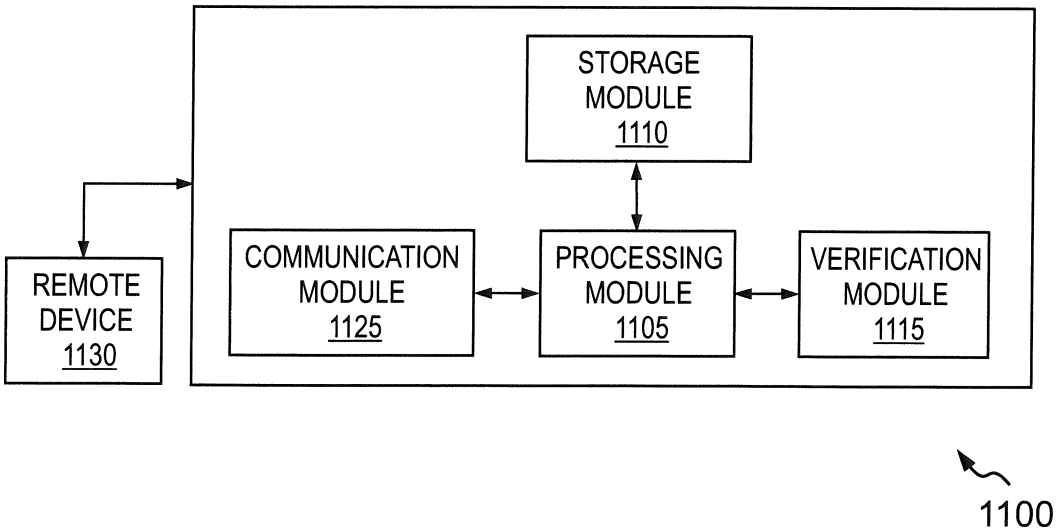

STORAGE MODULE 1110
REMOTE DEVICE 1130
COMMUNICATION MODULE 1125
PROCESSING MODULE 1105
VERIFICATION MODULE 1115
1100

FIG. 11

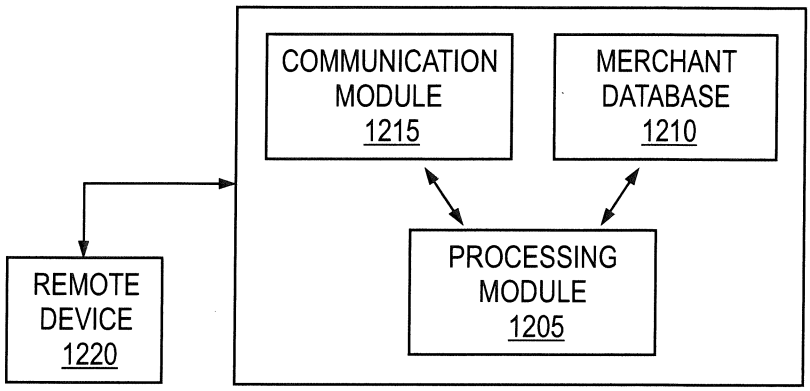

COMMUNICATION MODULE 1215
MERCHANT DATABASE 1210
PROCESSING MODULE 1205
REMOTE DEVICE 1220
1200

FIG. 12

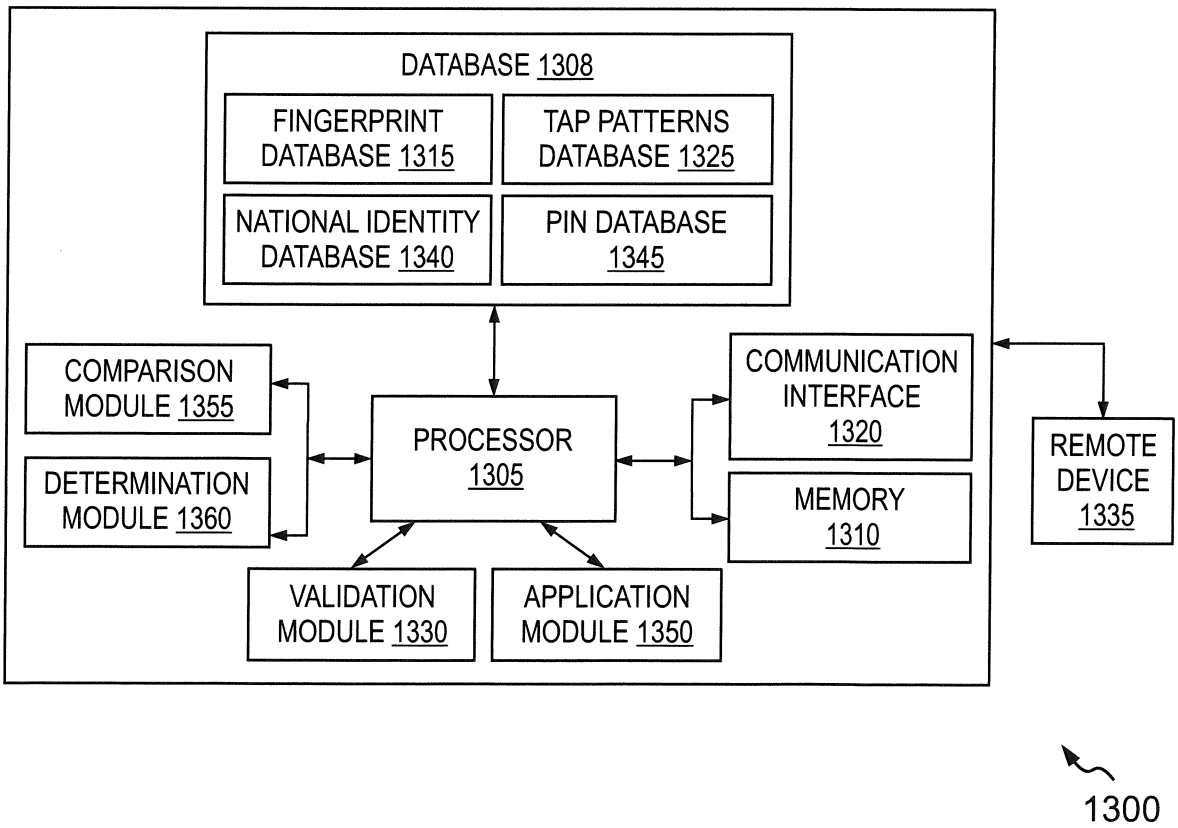

DATABASE 1308
FINGERPRINT DATABASE 1315
TAP PATTERNS DATABASE 1325
NATIONAL IDENTITY DATABASE 1340
PIN DATABASE 1345
COMPARISON MODULE 1355
DETERMINATION MODULE 1360
PROCESSOR 1305
COMMUNICATION INTERFACE 1320
MEMORY 1310
REMOTE DEVICE 1335
VALIDATION MODULE 1330
APPLICATION MODULE 1350
1300

FIG. 13

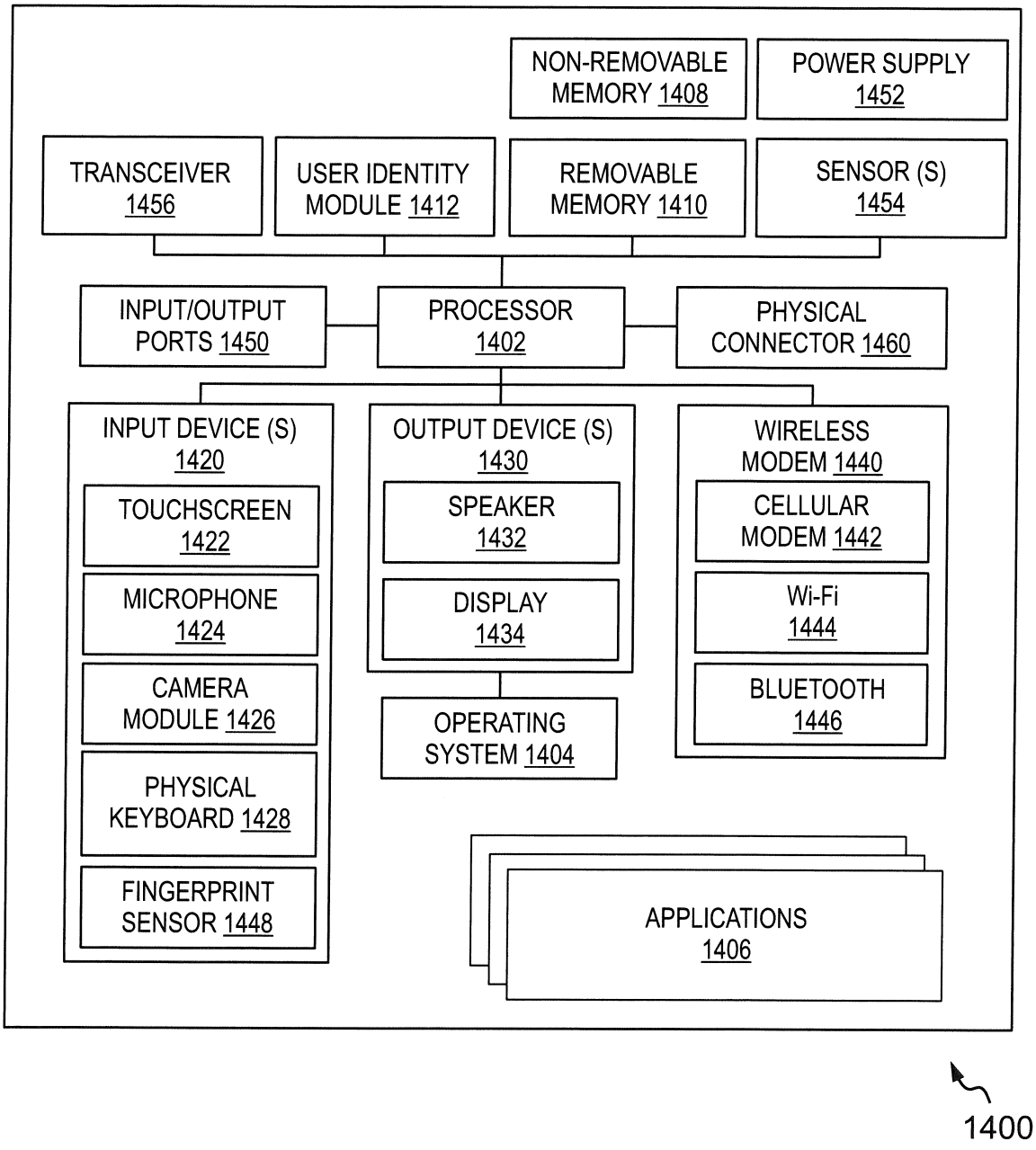

NON-REMOVABLE MEMORY 1408
POWER SUPPLY 1452
TRANSCEIVER 1456
USER IDENTITY MODULE 1412
REMOVABLE MEMORY 1410
SENSOR (S) 1454
INPUT/OUTPUT PORTS 1450
PROCESSOR 1402
PHYSICAL CONNECTOR 1460
INPUT DEVICE (S) 1420
TOUCHSCREEN 1422
MICROPHONE 1424
CAMERA MODULE 1426
PHYSICAL KEYBOARD 1428
FINGERPRINT SENSOR 1448
OUTPUT DEVICE (S) 1430
SPEAKER 1432
DISPLAY 1434
OPERATING SYSTEM 1404
WIRELESS MODEM 1440
CELLULAR MODEM 1442
Wi-Fi 1444
BLUETOOTH 1446
APPLICATIONS 1406
1400

FIG. 14