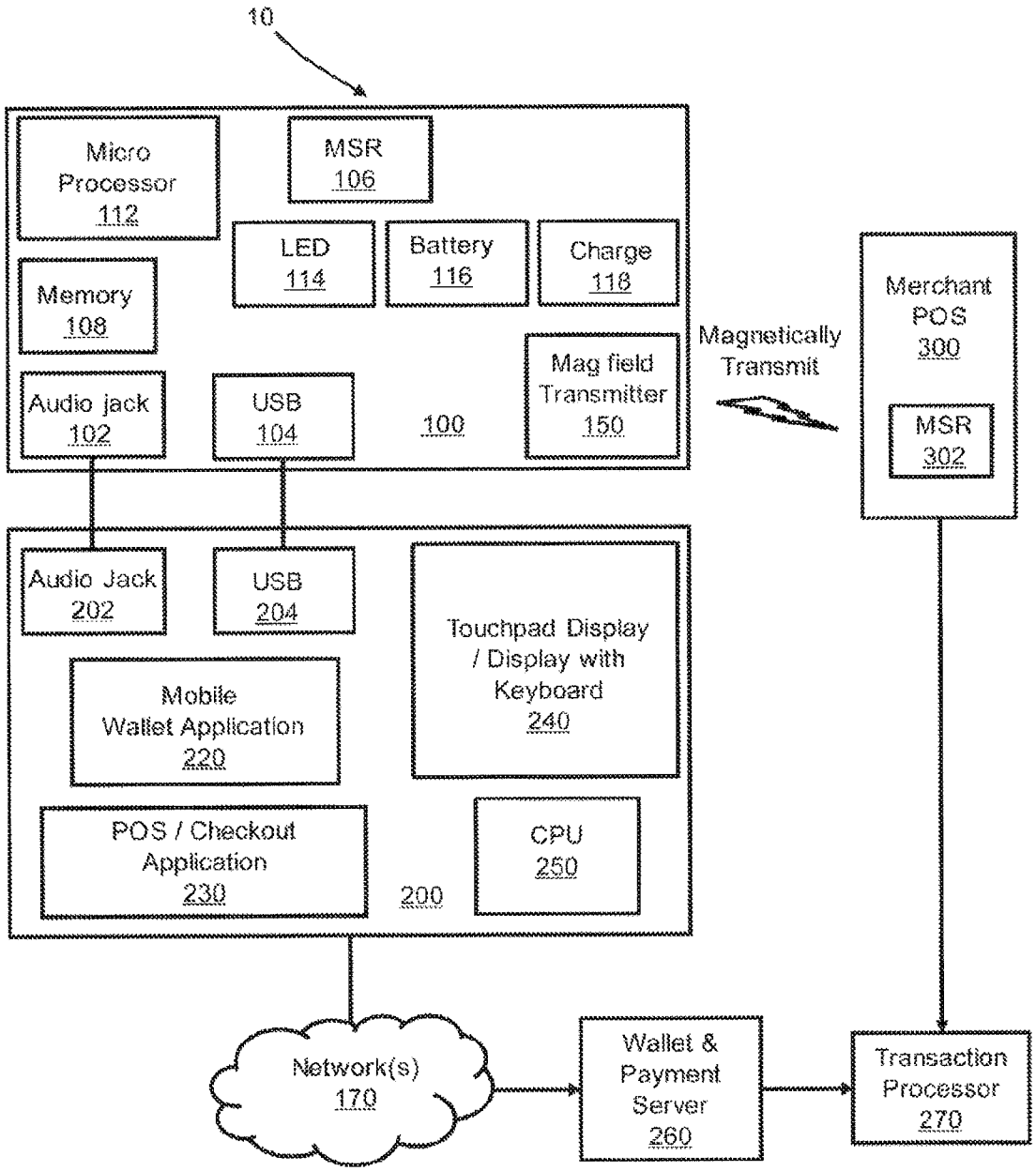

10
Micro Processor 112
MSR 106
LED 114
Battery 116
Charge 118
Memory 108
Mag field Transmitter 150
Audio jack 102
USB 104
100
Magnetically Transmit
Merchant POS 300
MSR 302
Audio Jack 202
USB 204
Touchpad Display / Display with Keyboard 240
Mobile Wallet Application 220
POS / Checkout Application 230
CPU 250
200
Network(s) 170
Wallet & Payment Server 260
Transaction Processor 270

FIG. 1

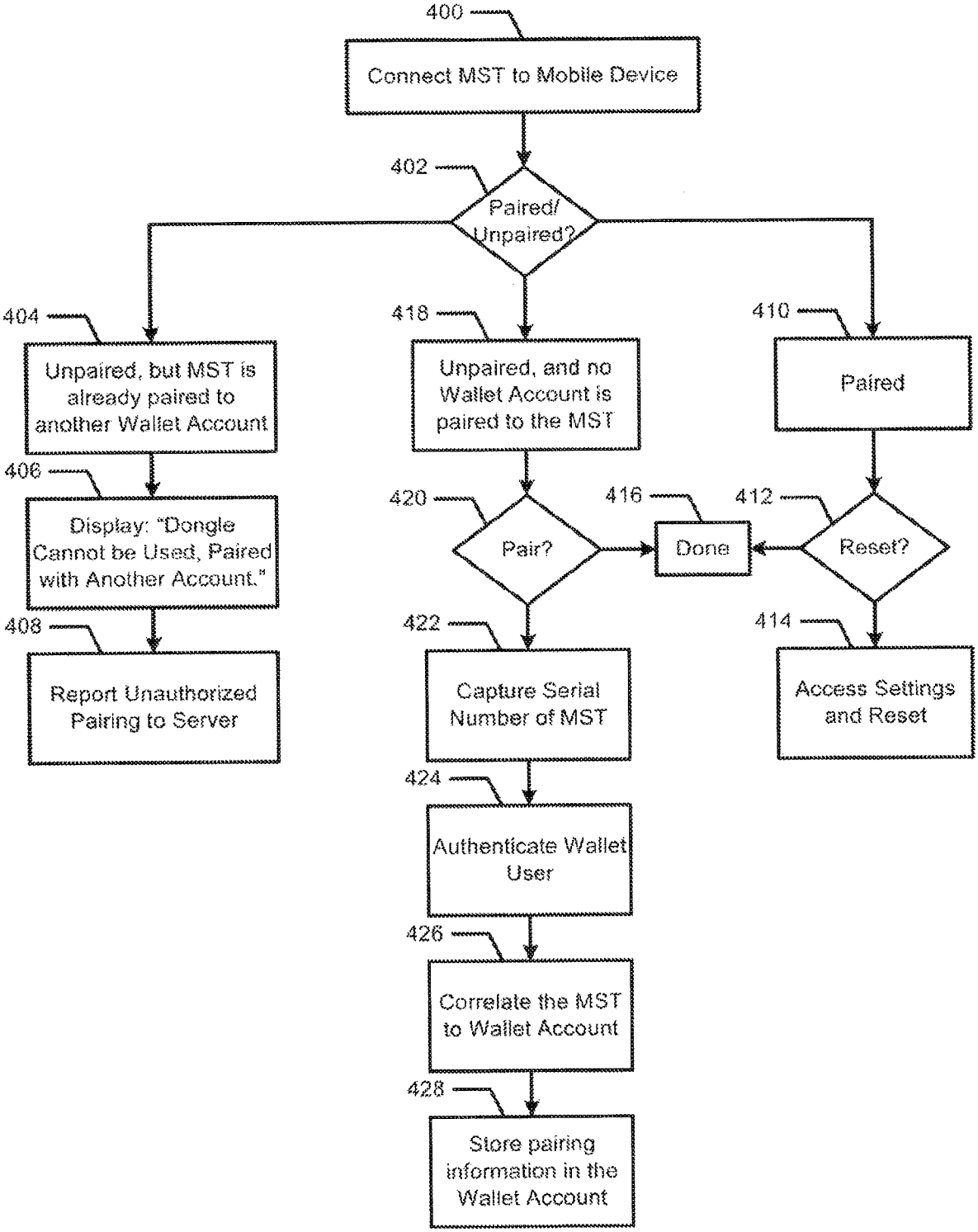

400
Connect MST to Mobile Device
402
Paired/ Unpaired?
404
Unpaired, but MST is already paired to another Wallet Account
406
Display: "Dongle Cannot be Used, Paired with Another Account."
408
Report Unauthorized Pairing to Server
418
Unpaired, and no Wallet Account is paired to the MST
420
Pair?
422
Capture Serial Number of MST
424
Authenticate Wallet User
426
Correlate the MST to Wallet Account
428
Store pairing information in the Wallet Account
410
Paired
412
Reset?
414
Access Settings and Reset
416
Done

FIG. 2

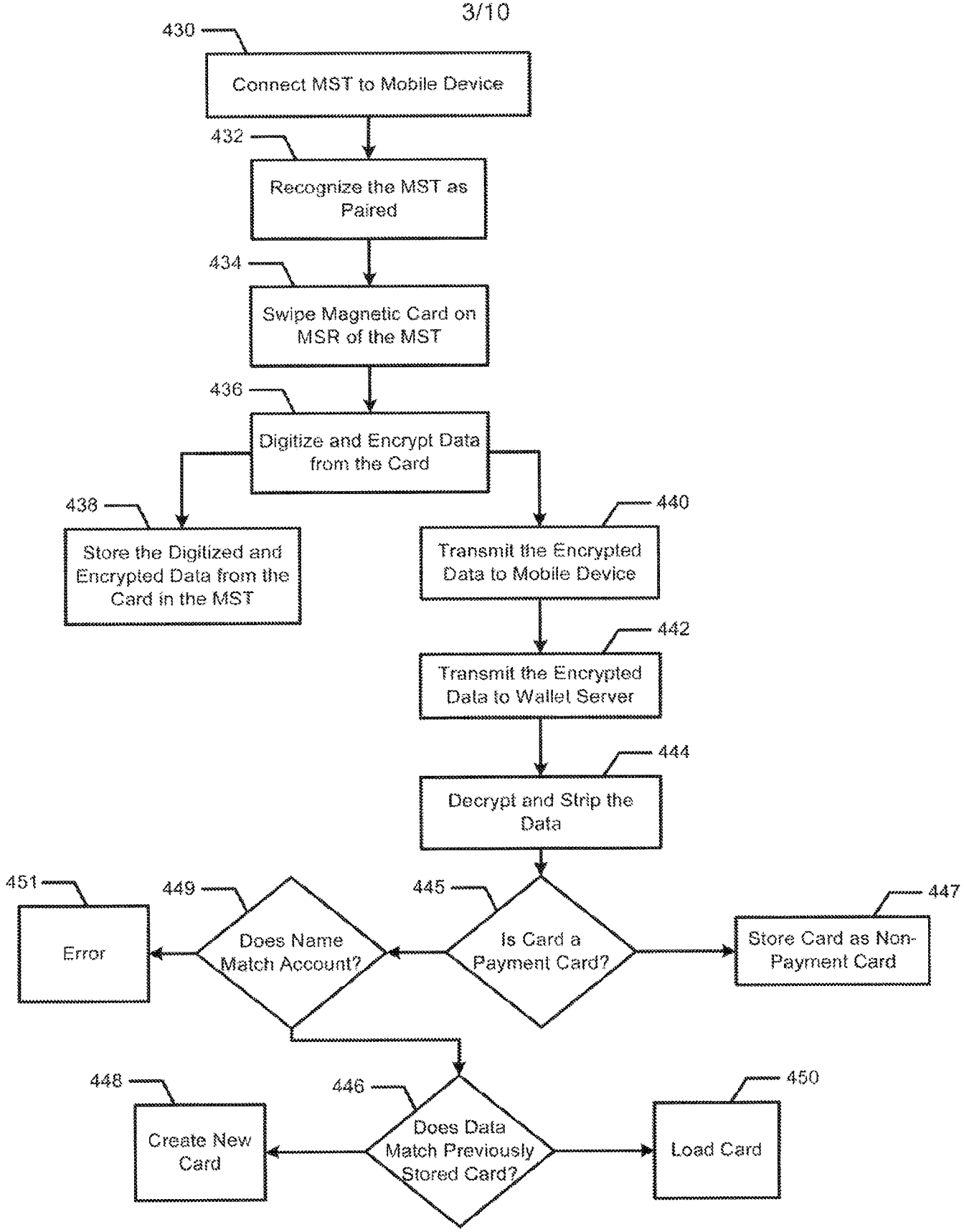

430
Connect MST to Mobile Device
432
Recognize the MST as Paired
434
Swipe Magnetic Card on MSR of the MST
436
Digitize and Encrypt Data from the Card
438
Store the Digitized and Encrypted Data from the Card in the MST
440
Transmit the Encrypted Data to Mobile Device
442
Transmit the Encrypted Data to Wallet Server
444
Decrypt and Strip the Data
445
Is Card a Payment Card?
447
Store Card as Non-Payment Card
449
Does Name Match Account?
451
Error
446
Does Data Match Previously Stored Card?
448
Create New Card
450
Load Card

FIG. 3

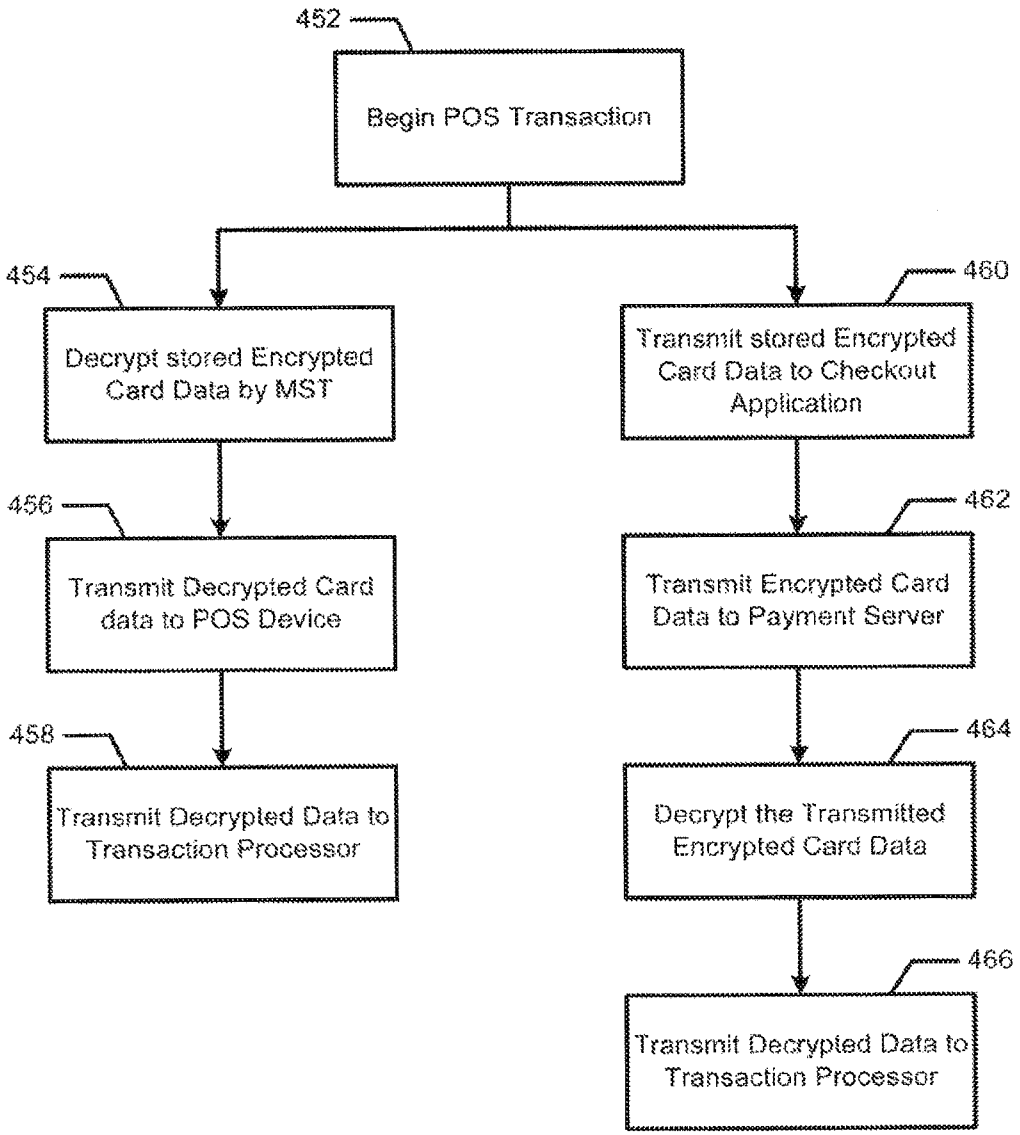

452
Begin POS Transaction
454
Decrypt stored Encrypted Card Data by MST
456
Transmit Decrypted Card data to POS Device
458
Transmit Decrypted Data to Transaction Processor
460
Transmit stored Encrypted Card Data to Checkout Application
462
Transmit Encrypted Card Data to Payment Server
464
Decrypt the Transmitted Encrypted Card Data
466
Transmit Decrypted Data to Transaction Processor

FIG. 4

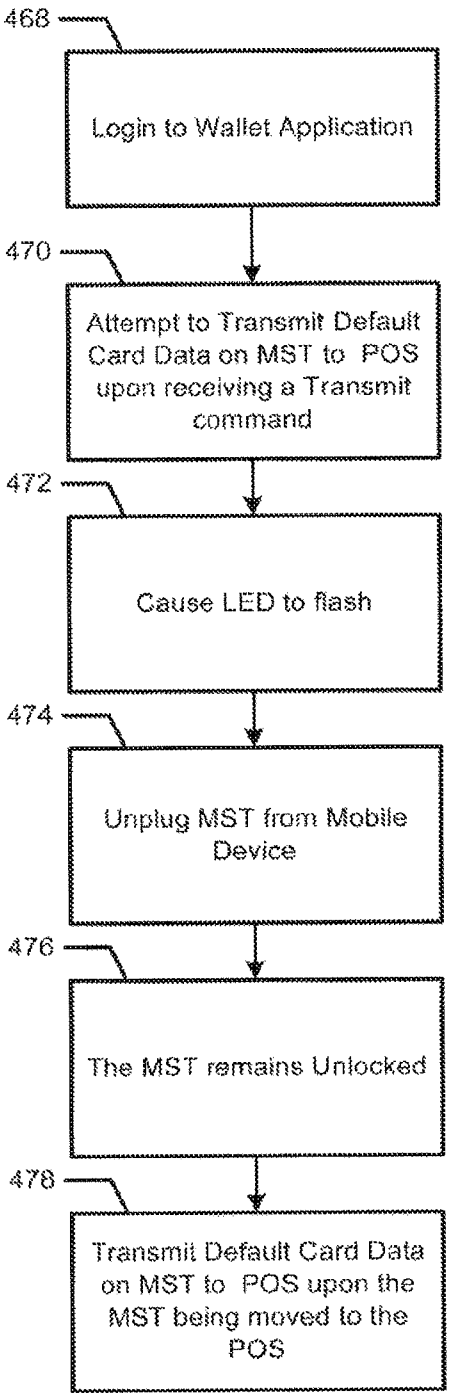

468
Login to Wallet Application
470
Attempt to Transmit Default Card Data on MST to POS upon receiving a Transmit command
472
Cause LED to flash
474
Unplug MST from Mobile Device
476
The MST remains Unlocked
478
Transmit Default Card Data on MST to POS upon the MST being moved to the POS

FIG. 5

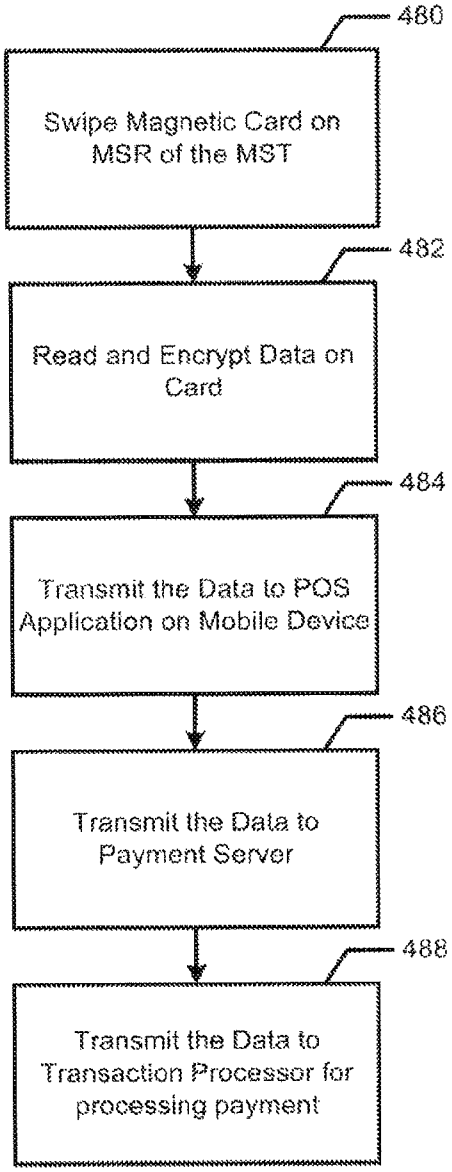

480
Swipe Magnetic Card on MSR of the MST
482
Read and Encrypt Data on Card
484
Transmit the Data to POS Application on Mobile Device
486
Transmit the Data to Payment Server
488
Transmit the Data to Transaction Processor for processing payment

FIG. 6

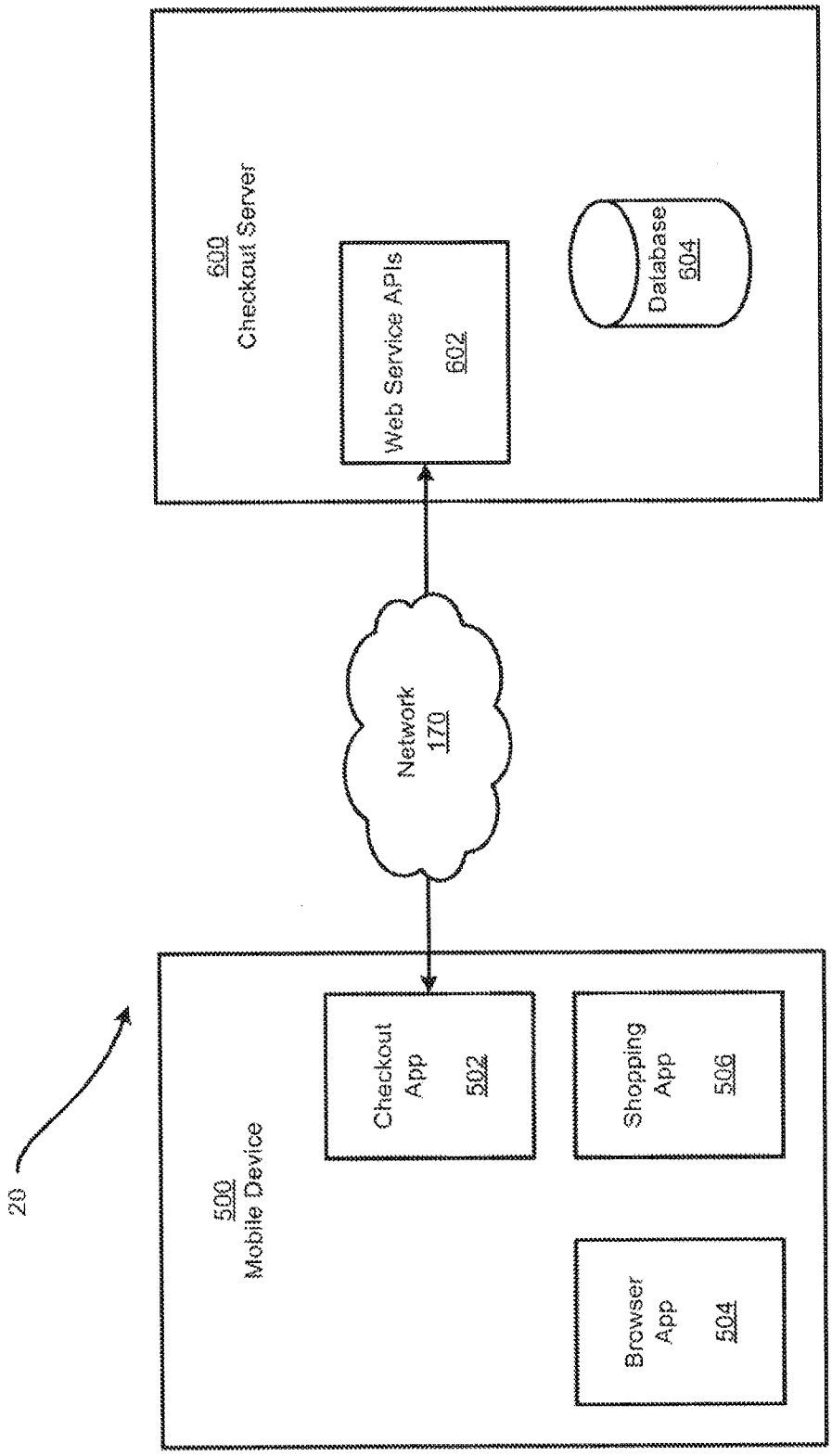

20
500
Mobile Device
Checkout App 502
Shopping App 506
Browser App 504
Network 170
600
Checkout Server
Web Service APIs 602
Database 604

FIG. 7

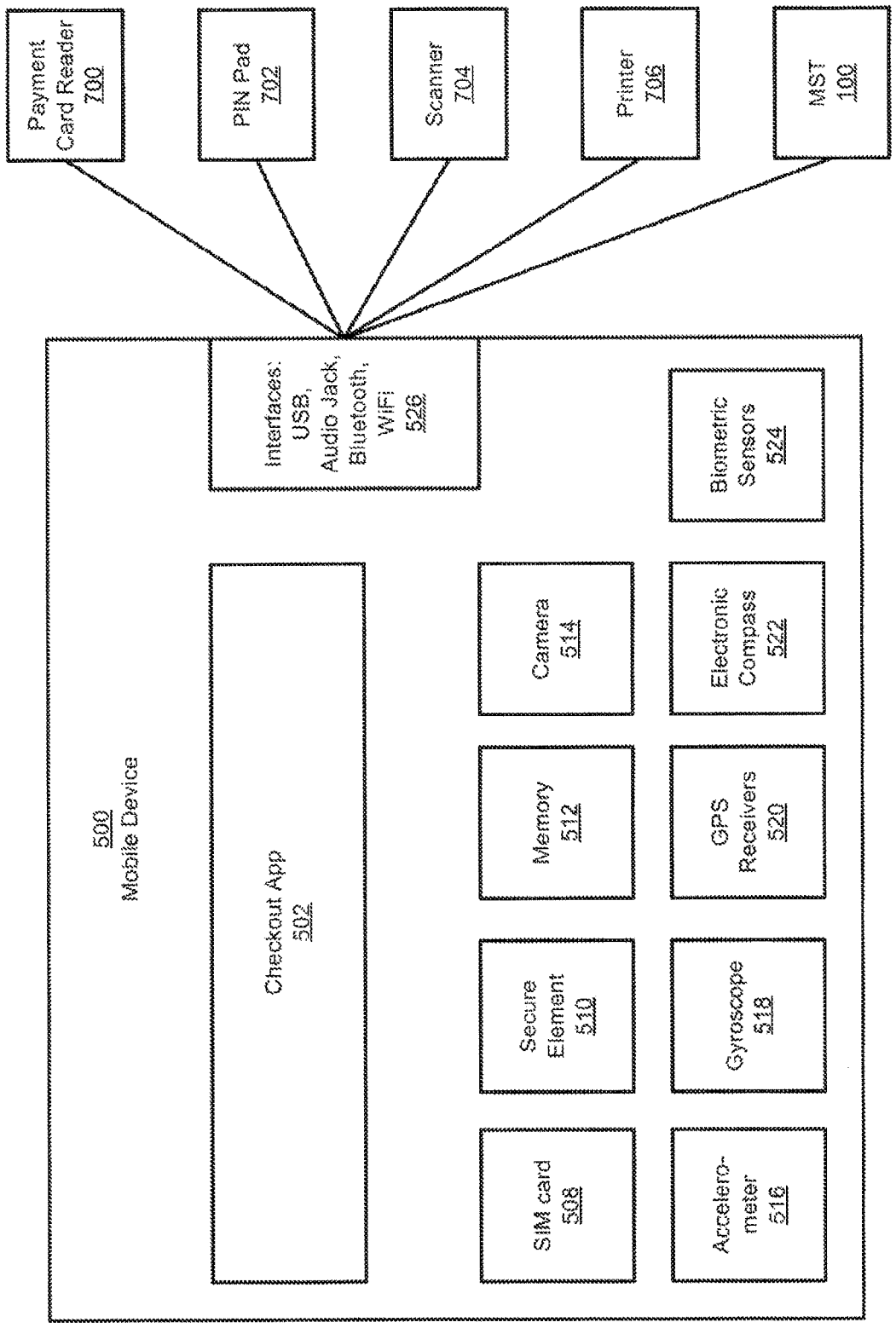

Payment Card Reader 700
PIN Pad 702
Scanner 704
Printer 706
MST 102
500 Mobile Device
Interfaces: USB, Audio Jack, Bluetooth, WiFi 526
Biometric Sensors 524
Checkout App 502
Camera 514
Electronic Compass 522
Memory 512
GPS Receivers 520
Secure Element 510
Gyroscope 518
SIM card 508
Accelero-meter 516

FIG. 8

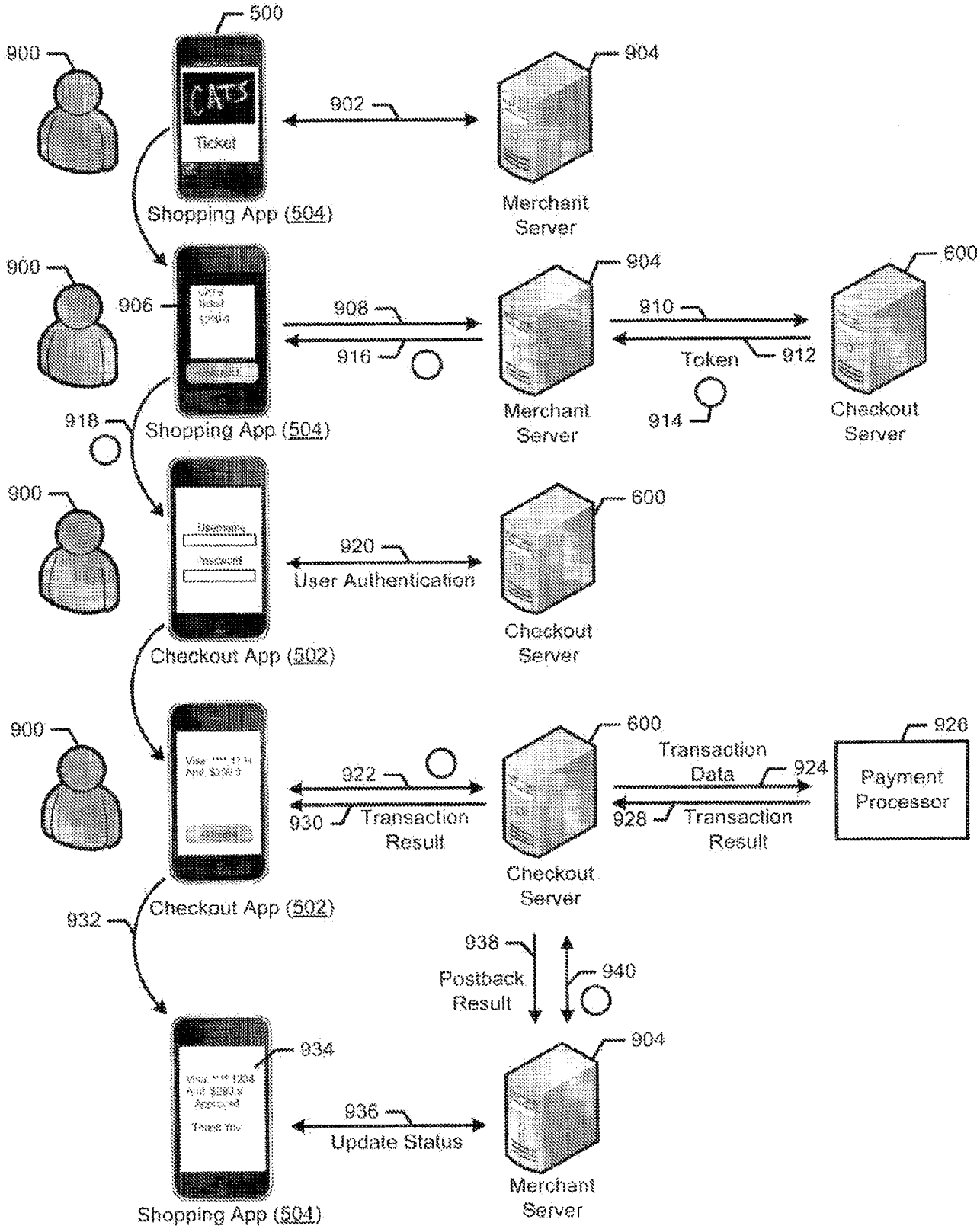

500
900
CATS
Ticket
902
904
Shopping App (504)
Merchant Server
900
906
908
916
904
910
912
Token
600
914
Shopping App (504)
Merchant Server
Checkout Server
918
900
920
User Authentication
600
Checkout App (502)
Checkout Server
900
922
930
Transaction Result
600
Transaction Data
924
928
Transaction Result
926
Payment Processor
Checkout App (502)
Checkout Server
932
938
Postback Result
940
934
936
Update Status
904
Shopping App (504)
Merchant Server

FIG. 9

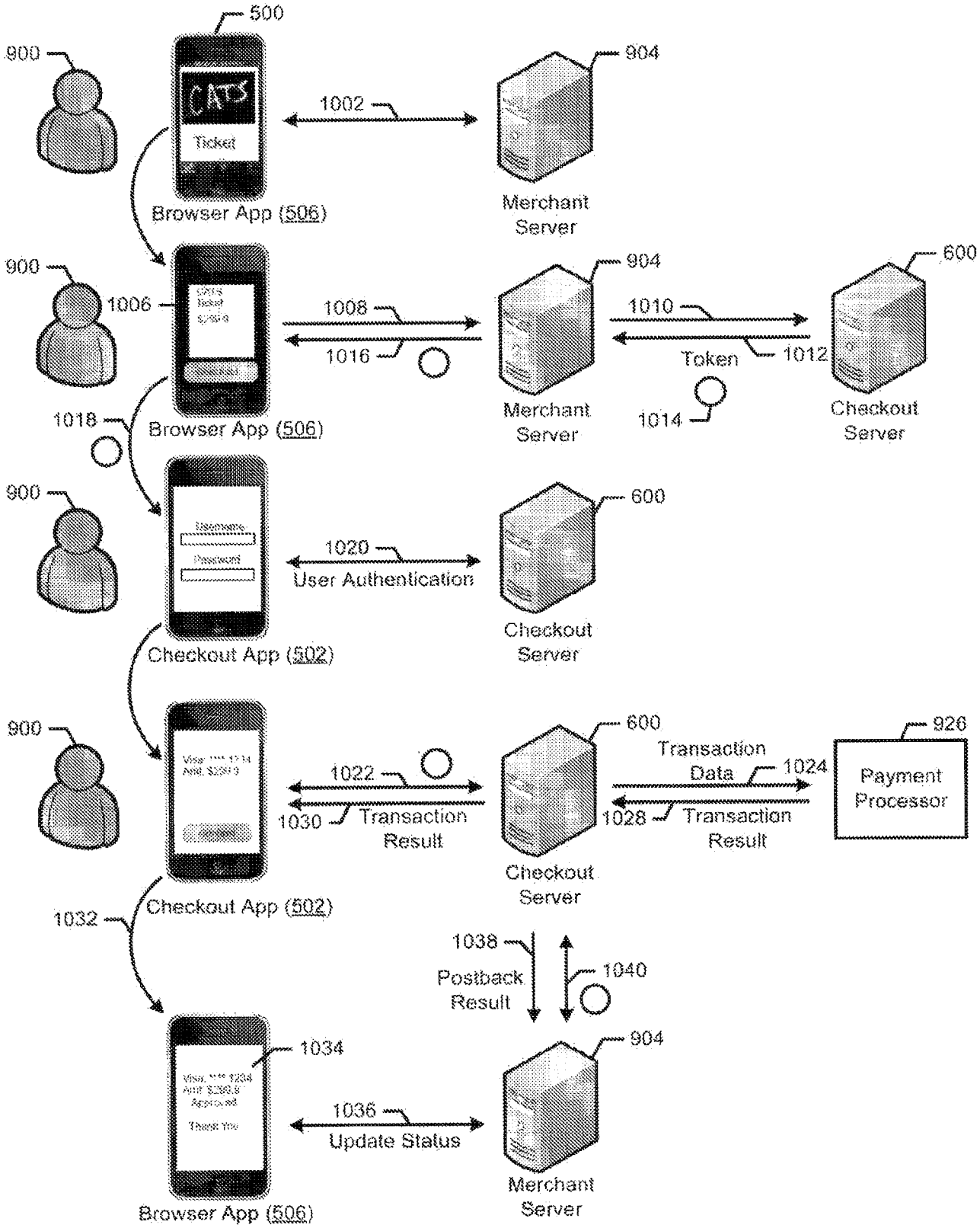

500
900
CATS
Ticket
1002
904
Browser App (506)
Merchant Server
900
1006
1008
1016
904
1010
Token
1012
600
1014
1018
Browser App (506)
Merchant Server
Checkout Server
900
Username
Password
1020
User Authentication
600
Checkout App (502)
Checkout Server
900
1022
1030
Transaction Result
600
Transaction Data
1024
1028
Transaction Result
926
Payment Processor
Checkout App (502)
Checkout Server
1032
1038
Postback Result
1040
1034
1036
Update Status
904
Browser App (506)
Merchant Server

FIG. 10

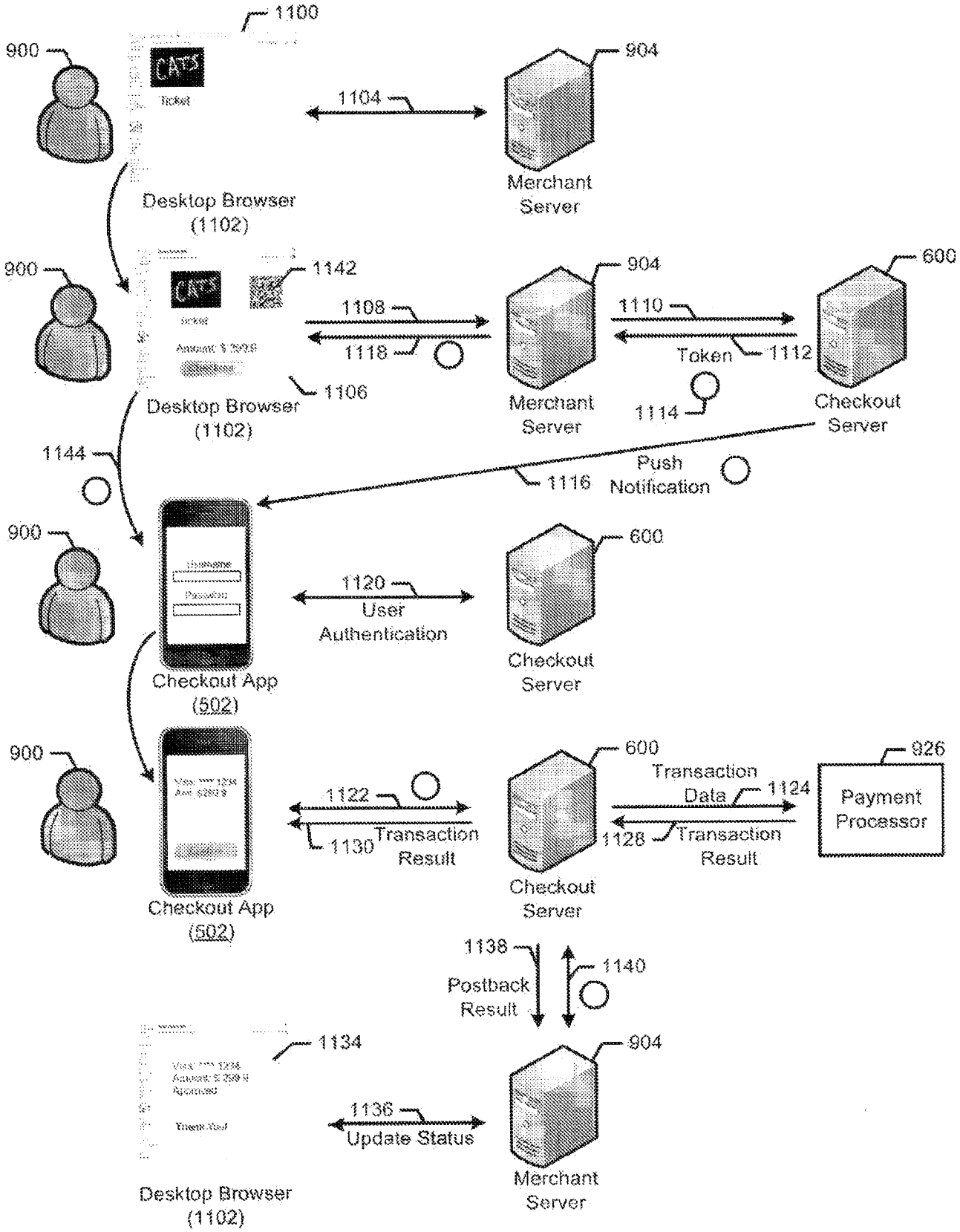

1100
900
CATS
Ticket
1104
904
Merchant Server
Desktop Browser (1102)
1142
1108
1118
1106
1110
Token
1112
600
Checkout Server
1114
1144
Push Notification
1116
Checkout App (502)
1120
User Authentication
1122
1130
Transaction Result
Transaction Data
1124
1128
926
Payment Processor
1138
Postback Result
1140
1134
1136
Update Status

FIG. 11