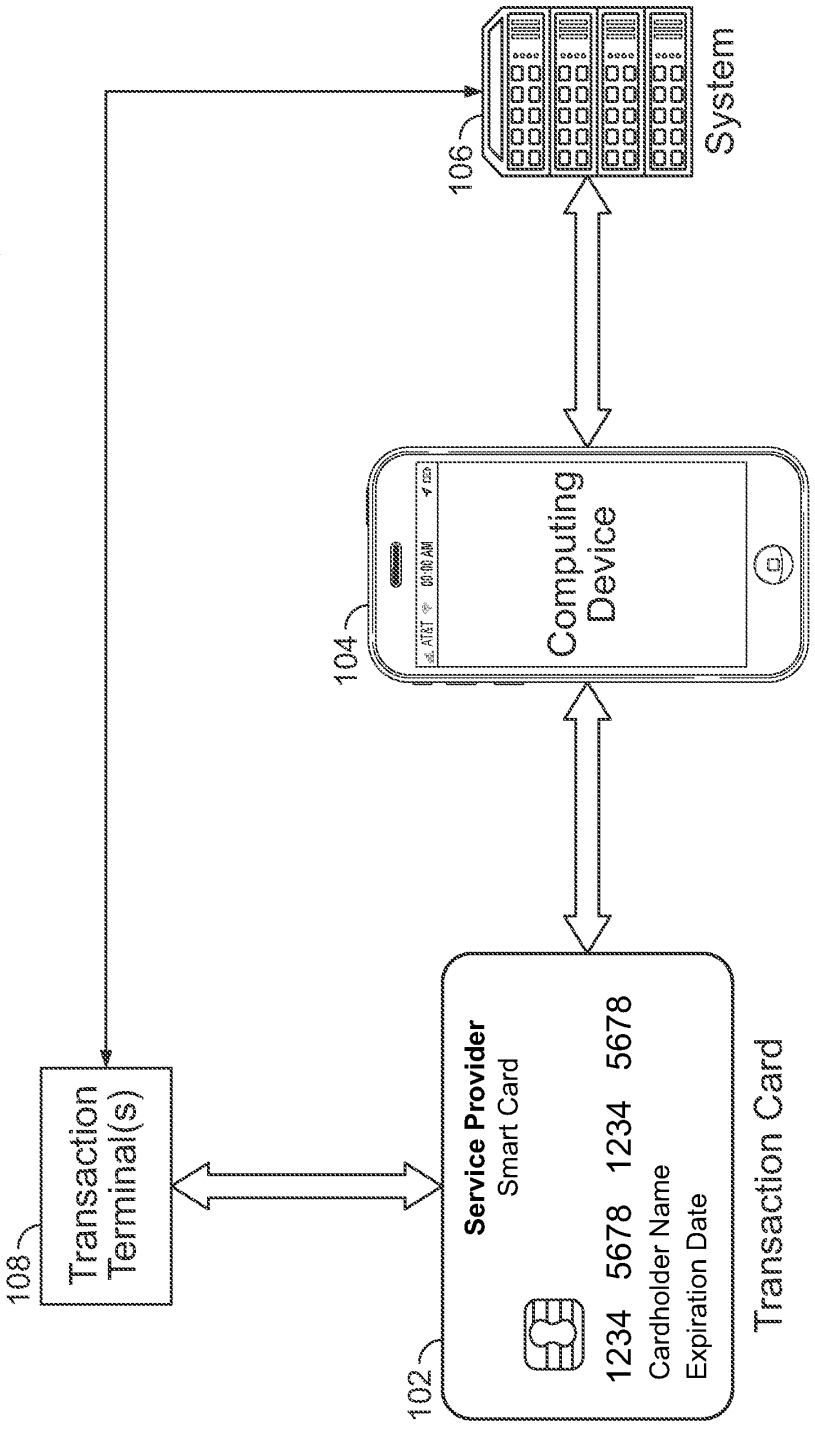

100
106
System
104
Computing Device
AT&T
09:06 AM
108
Transaction Terminal(s)
102
Service Provider
Smart Card
1234 5678 1234 5678
Cardholder Name
Expiration Date
Transaction Card

FIG. 1

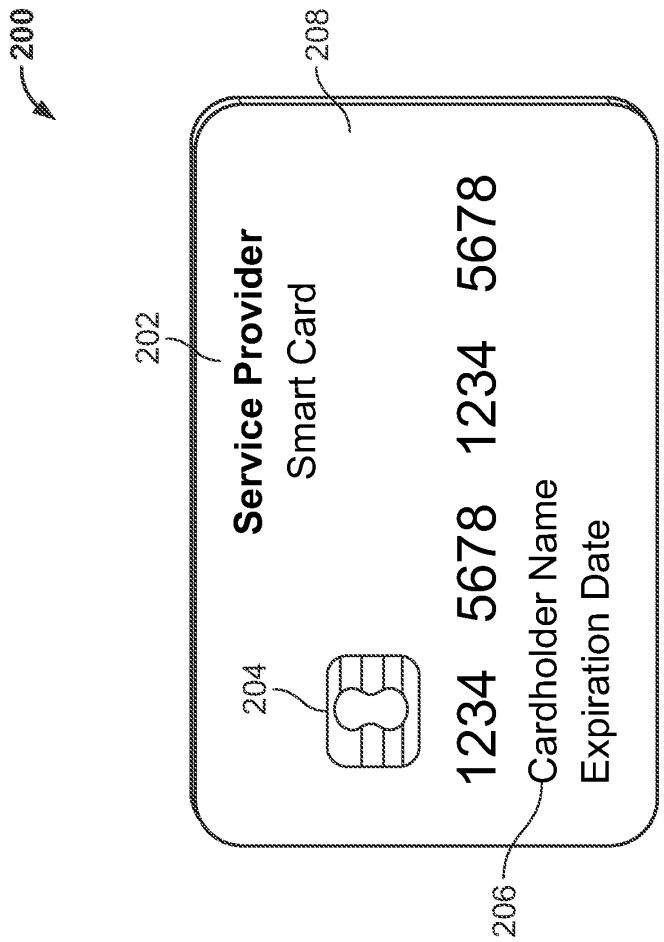

200
202
208
Service Provider
Smart Card
204
1234 5678 1234 5678
Cardholder Name
Expiration Date
206

FIG. 2

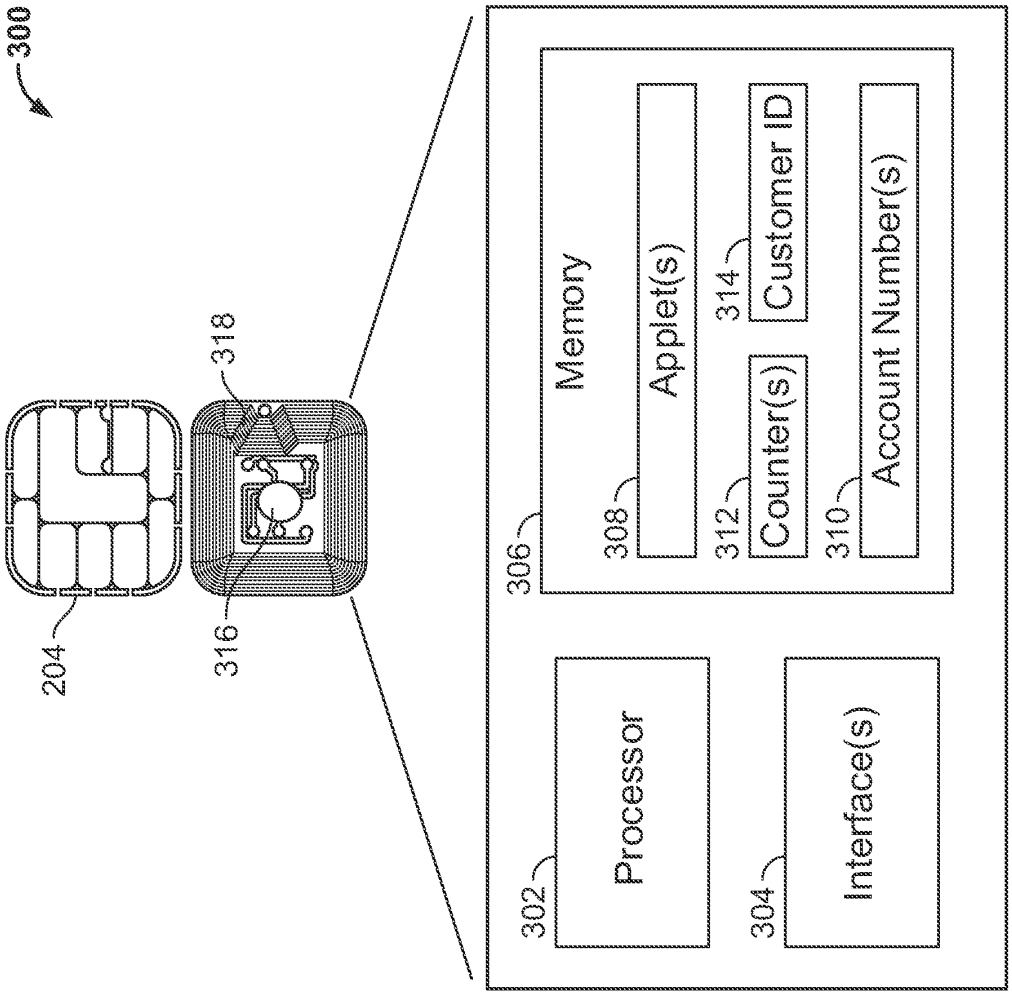

300
204
316
318
Processor
302
Interface(s)
304
Memory
306
Applet(s)
308
Counter(s)
312
Customer ID
314
Account Number(s)
310

FIG. 3

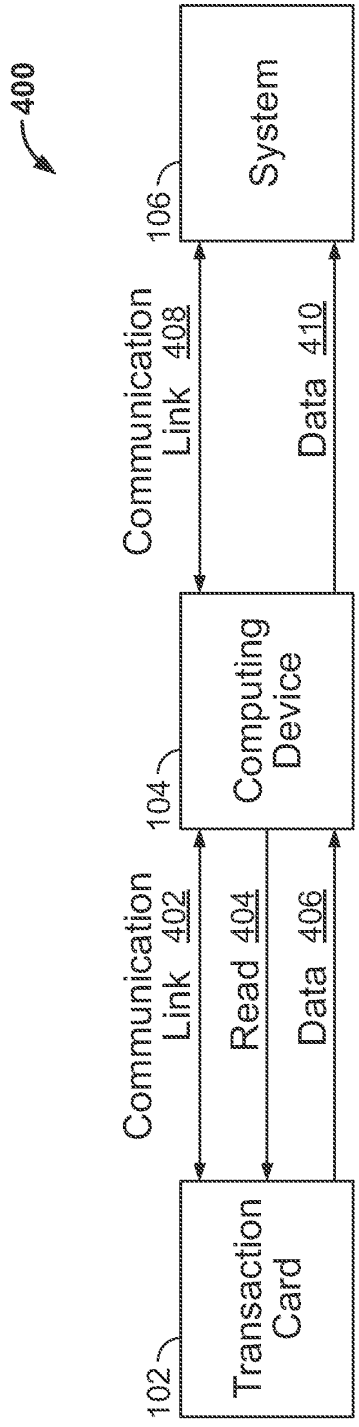

400
102
Transaction Card
104
Computing Device
106
System
Communication Link 402
Read 404
Data 406
Communication Link 408
Data 410

FIG. 4

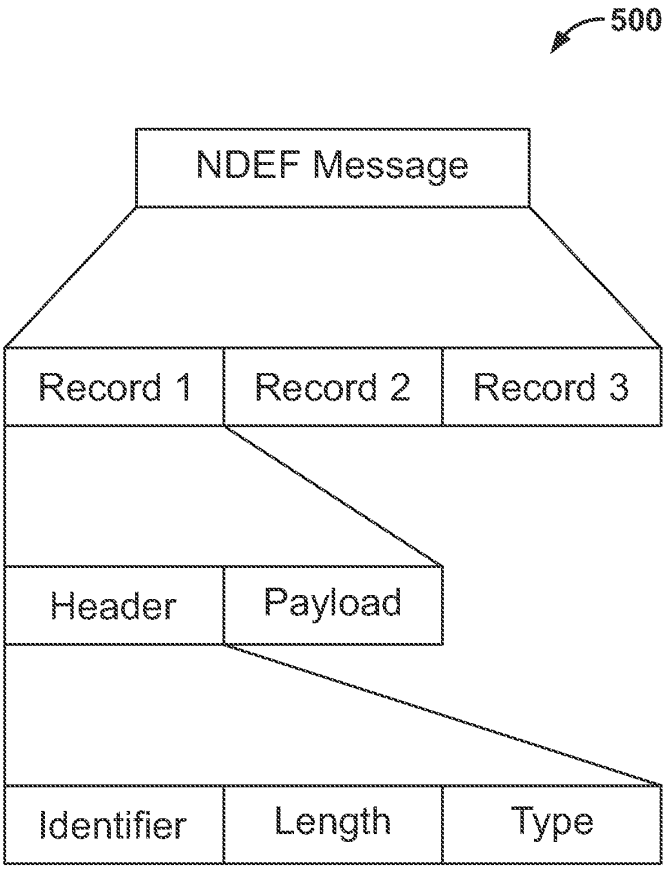

500
NDEF Message
Record 1
Record 2
Record 3
Header
Payload
Identifier
Length
Type

FIG. 5

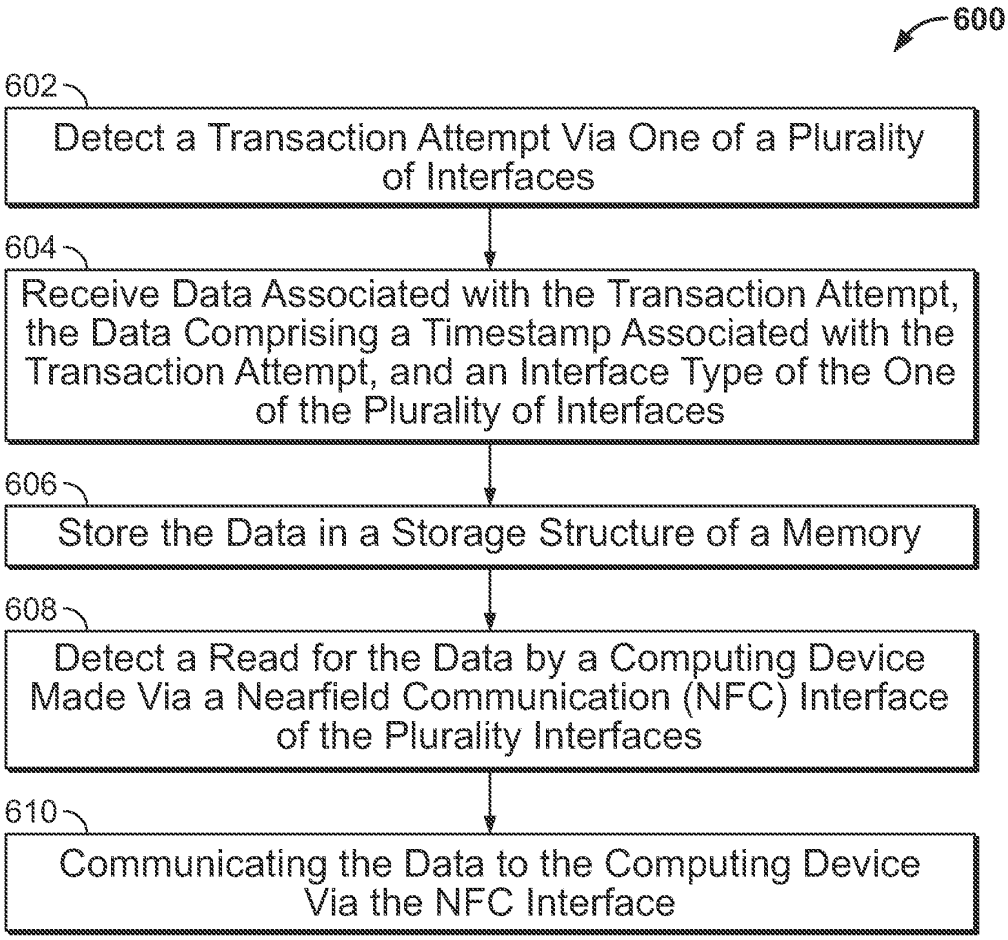

600
602
Detect a Transaction Attempt Via One of a Plurality of Interfaces
604
Receive Data Associated with the Transaction Attempt, the Data Comprising a Timestamp Associated with the Transaction Attempt, and an Interface Type of the One of the Plurality of Interfaces
606
Store the Data in a Storage Structure of a Memory
608
Detect a Read for the Data by a Computing Device Made Via a Nearfield Communication (NFC) Interface of the Plurality Interfaces
610
Communicating the Data to the Computing Device Via the NFC Interface

FIG. 6

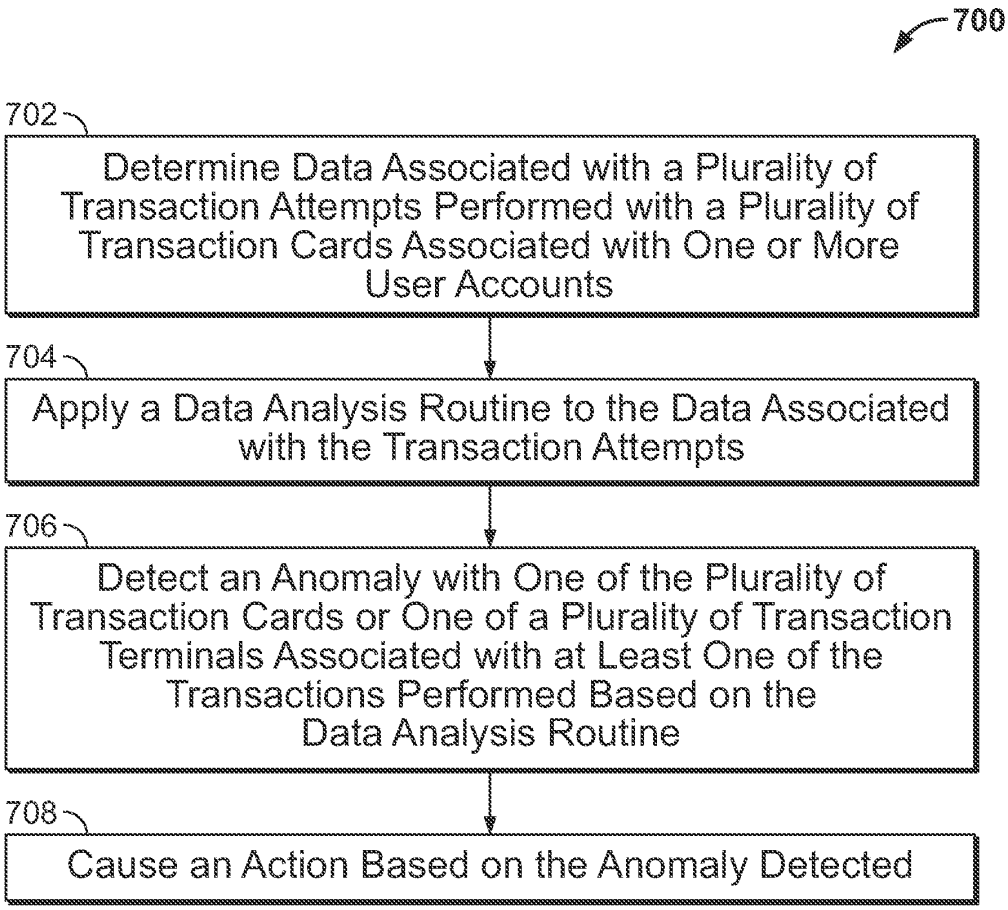
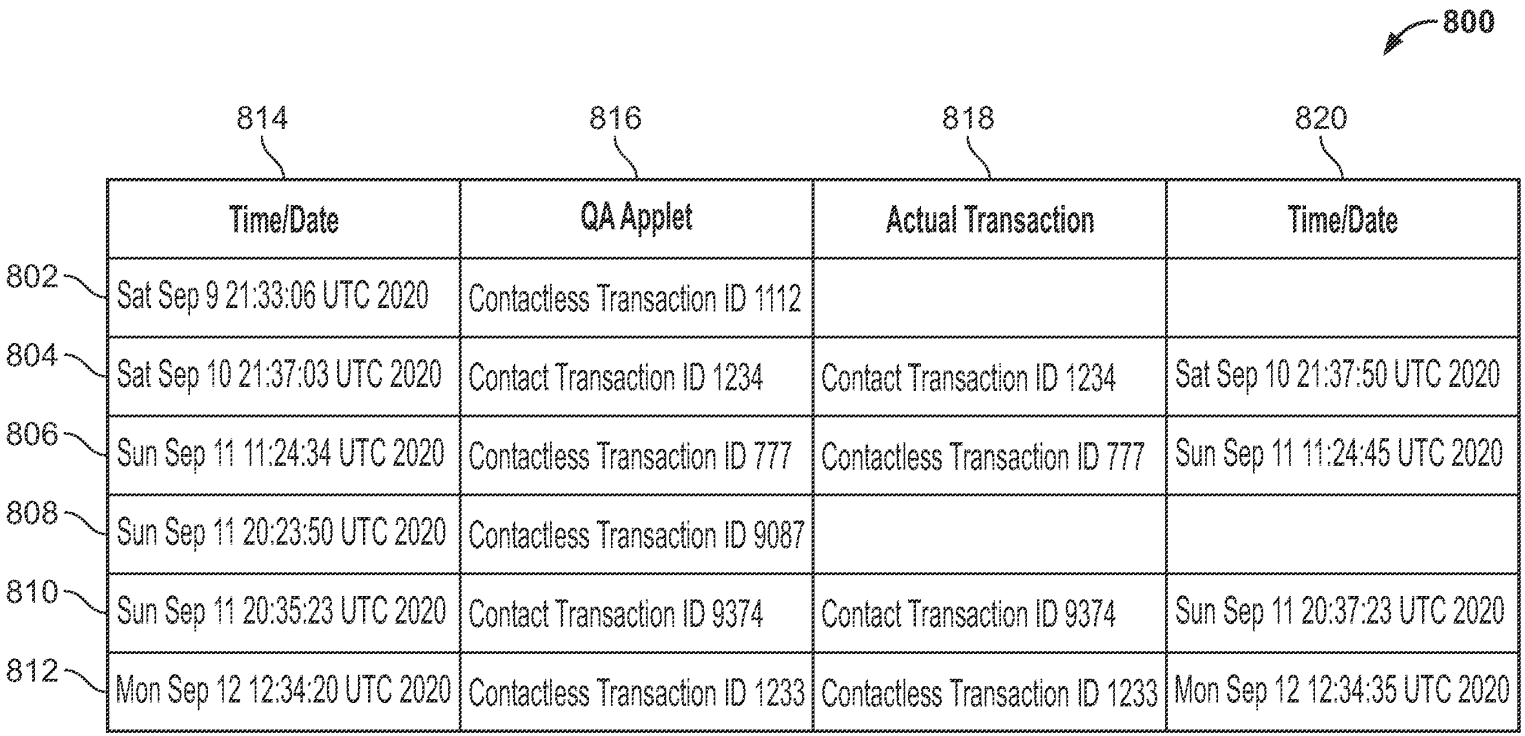

700
702
Determine Data Associated with a Plurality of Transaction Attempts Performed with a Plurality of Transaction Cards Associated with One or More User Accounts
704
Apply a Data Analysis Routine to the Data Associated with the Transaction Attempts
706
Detect an Anomaly with One of the Plurality of Transaction Cards or One of a Plurality of Transaction Terminals Associated with at Least One of the Transactions Performed Based on the Data Analysis Routine
708
Cause an Action Based on the Anomaly Detected

FIG. 7



Time/Date	QA Applet	Actual Transaction	Time/Date
Sat Sep 9 21:33:06 UTC 2020	Contactless Transaction ID 1112		
Sat Sep 10 21:37:03 UTC 2020	Contact Transaction ID 1234	Contact Transaction ID 1234	Sat Sep 10 21:37:50 UTC 2020
Sun Sep 11 11:24:34 UTC 2020	Contactless Transaction ID 777	Contactless Transaction ID 777	Sun Sep 11 11:24:45 UTC 2020
Sun Sep 11 20:23:50 UTC 2020	Contactless Transaction ID 9087		
Sun Sep 11 20:35:23 UTC 2020	Contact Transaction ID 9374	Contact Transaction ID 9374	Sun Sep 11 20:37:23 UTC 2020
Mon Sep 12 12:34:20 UTC 2020	Contactless Transaction ID 1233	Contactless Transaction ID 1233	Mon Sep 12 12:34:35 UTC 2020

FIG. 8

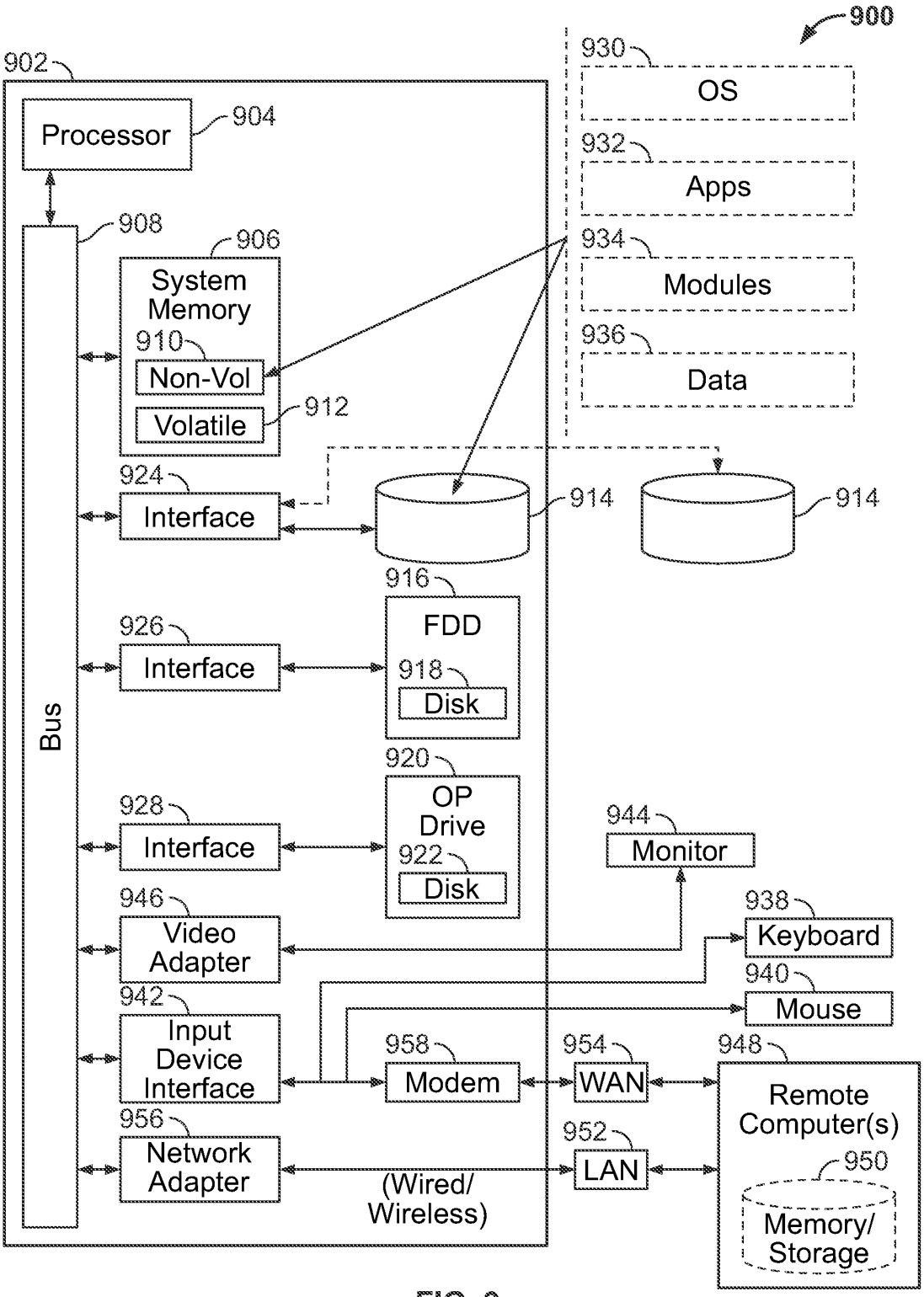

900
902
Processor
904
908
Bus
906
System Memory
910
Non-Vol
912
Volatile
930
OS
932
Apps
934
Modules
936
Data
924
Interface
914
914
916
FDD
926
Interface
918
Disk
920
OP Drive
928
Interface
922
Disk
944
Monitor
946
Video Adapter
938
Keyboard
940
Mouse
942
Input Device Interface
958
Modem
954
WAN
948
Remote Computer(s)
956
Network Adapter
952
LAN
950
(Wired/ Wireless)
Memory/ Storage

FIG. 9

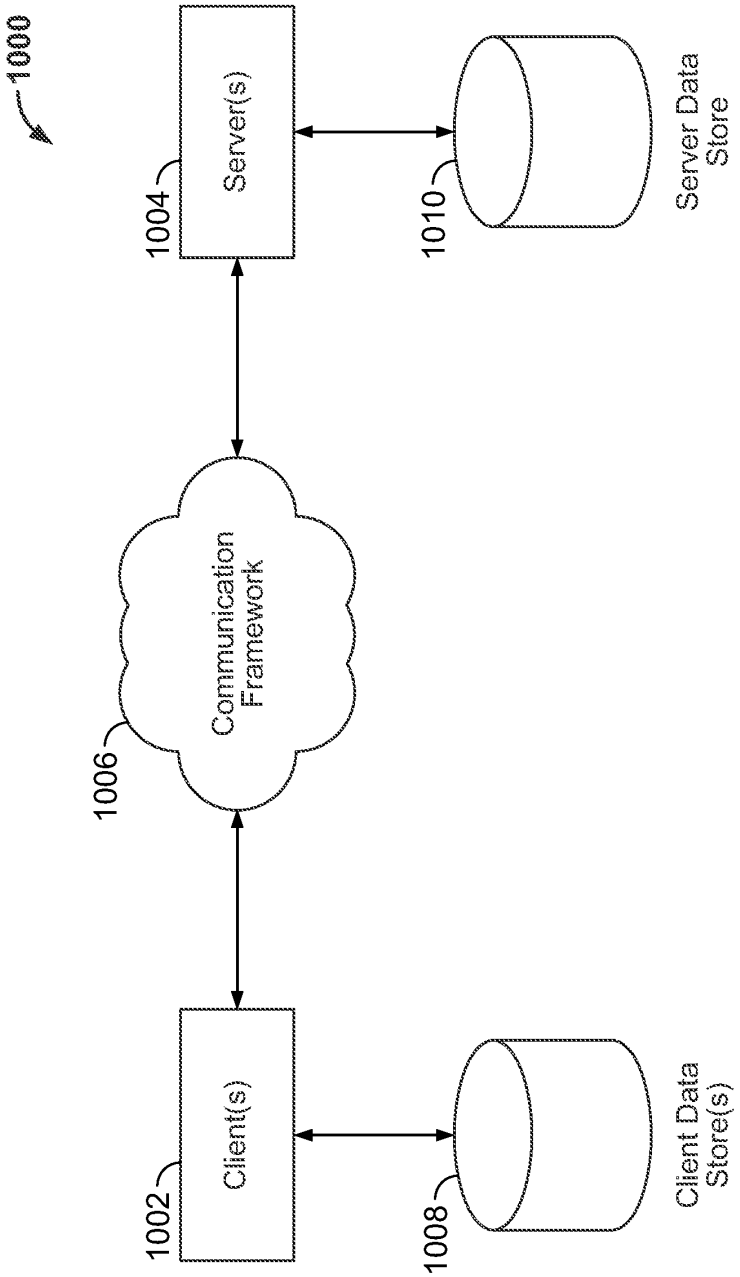

1000
Server(s)
1004
Server Data Store
1010
Communication Framework
1006
Client(s)
1002
Client Data Store(s)
1008

FIG. 10