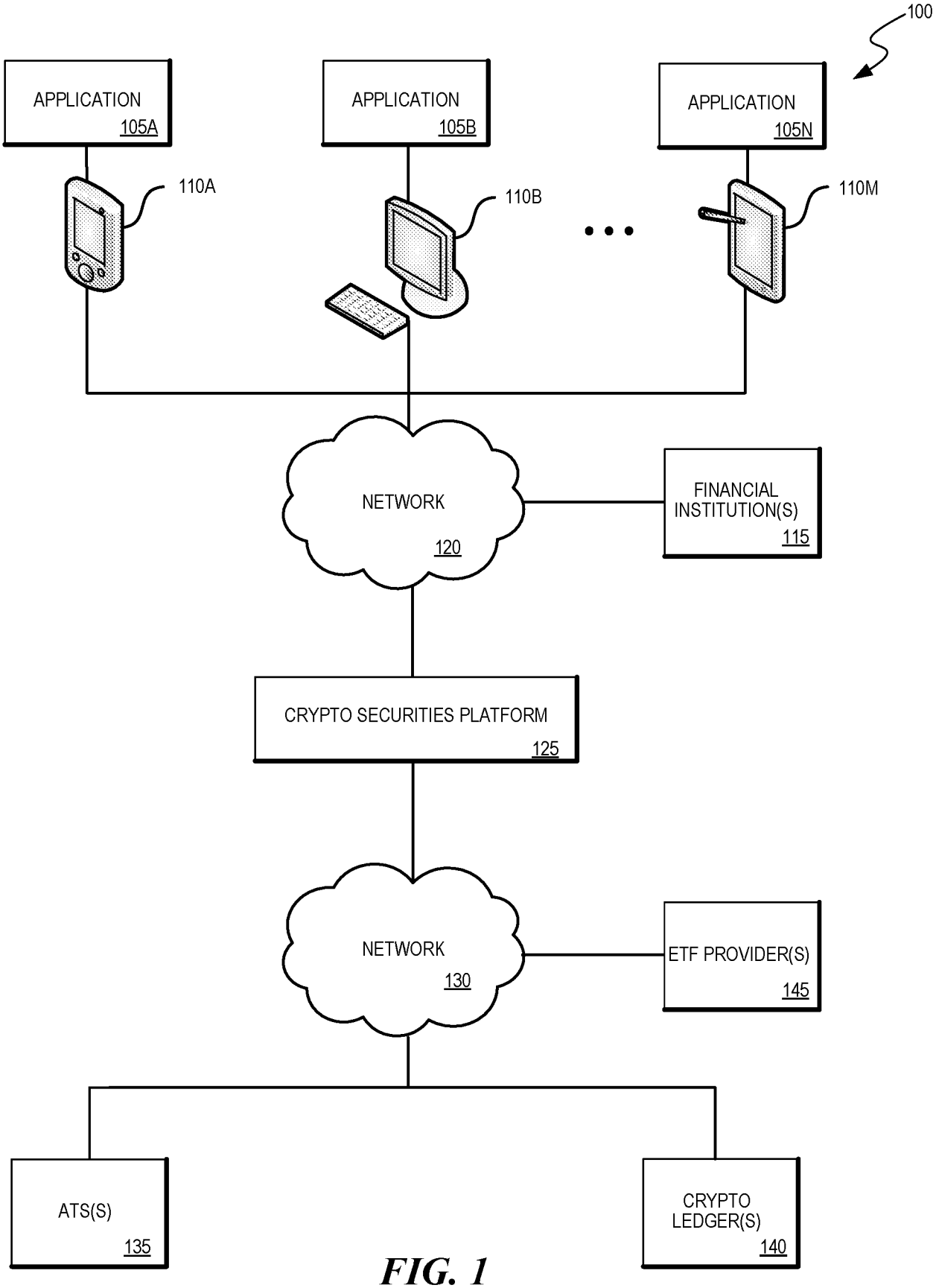

100
APPLICATION
105A
APPLICATION
105B
APPLICATION
105N
110A
110B
110M
NETWORK
120
FINANCIAL
INSTITUTION(S)
115
CRYPTO SECURITIES PLATFORM
125
NETWORK
130
ETF PROVIDER(S)
145
ATS(S)
135
CRYPTO
LEDGER(S)
140

FIG. 1

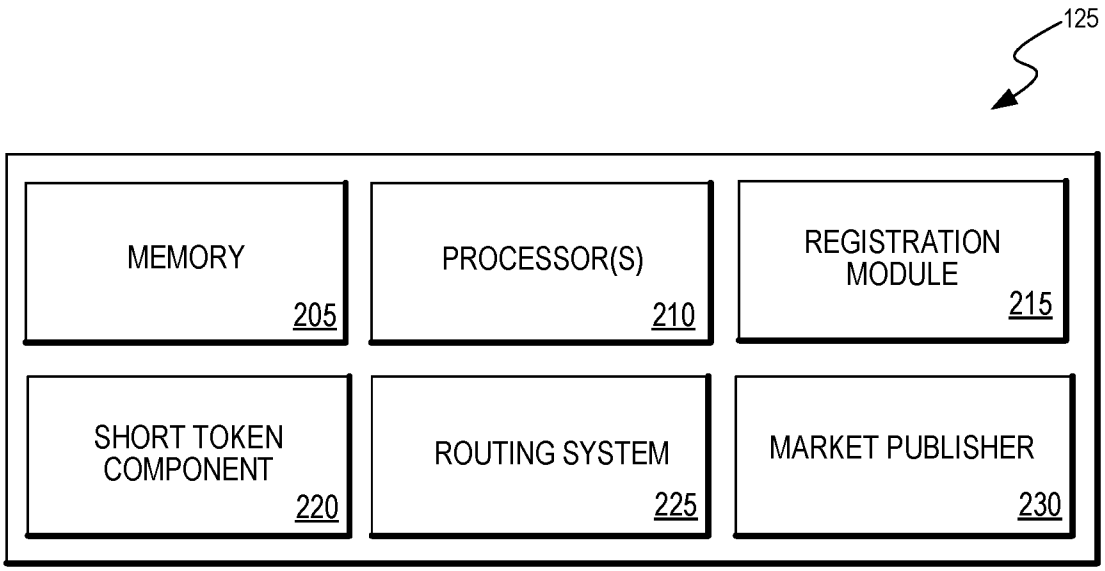

125
MEMORY
205
PROCESSOR(S)
210
REGISTRATION MODULE
215
SHORT TOKEN COMPONENT
220
ROUTING SYSTEM
225
MARKET PUBLISHER
230

FIG. 2

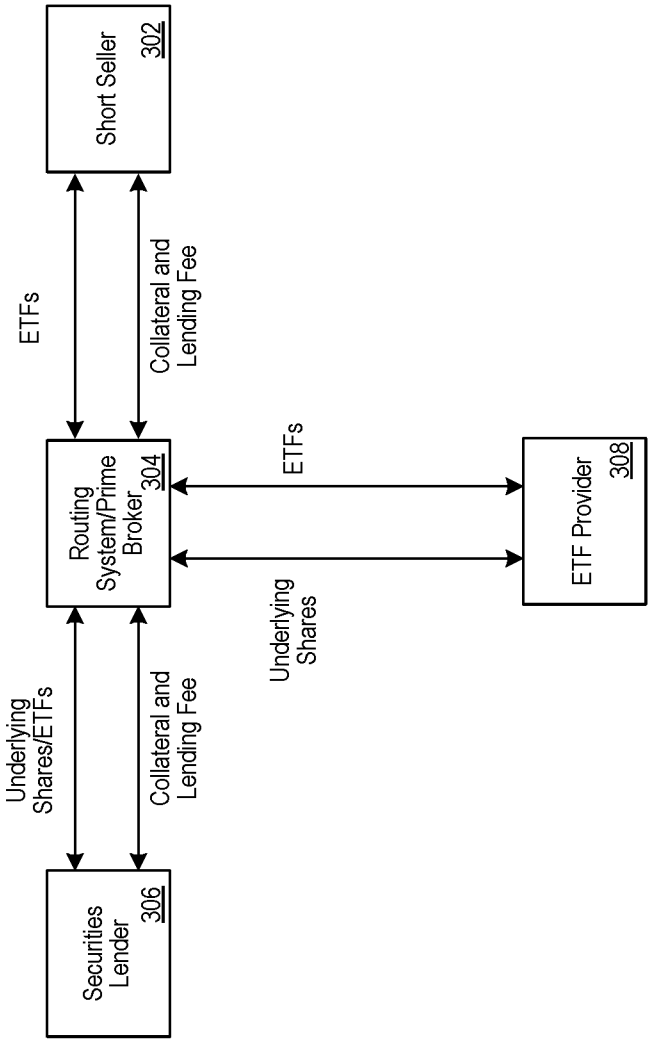

Short Seller
302
ETFs
Collateral and
Lending Fee
Routing
System/Prime
Broker
304
ETFs
Underlying
Shares
ETF Provider
308
Underlying
Shares/ETFs
Collateral and
Lending Fee
Securities
Lender
306

FIG. 3

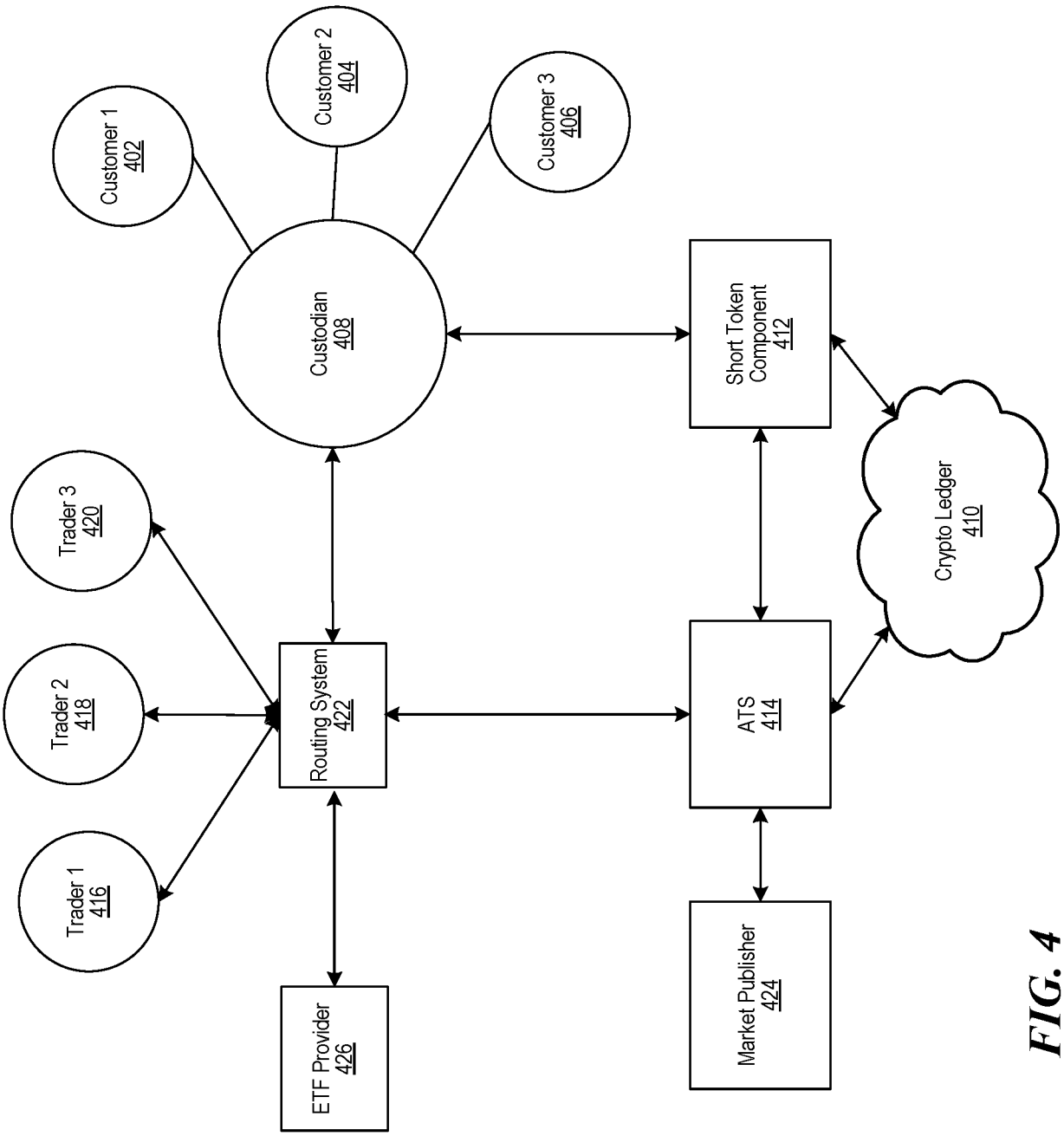

Customer 1
402
Customer 2
404
Customer 3
406
Custodian
408
Short Token
Component
412
Crypto Ledger
410
Trader 3
420
Trader 2
418
Trader 1
416
Routing System
422
ATS
414
ETF Provider
426
Market Publisher
424

FIG. 4

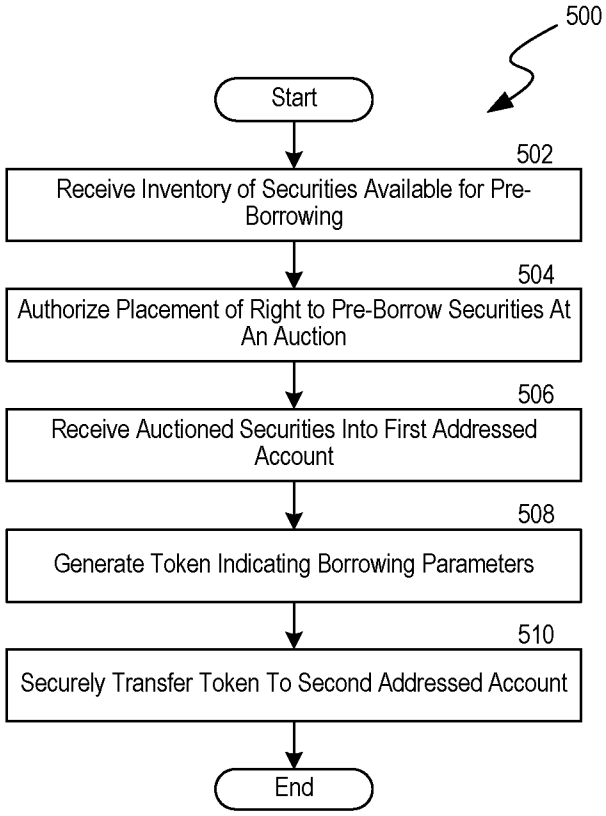

500
Start
502
Receive Inventory of Securities Available for Pre-Borrowing
504
Authorize Placement of Right to Pre-Borrow Securities At An Auction
506
Receive Auctioned Securities Into First Addressed Account
508
Generate Token Indicating Borrowing Parameters
510
Securely Transfer Token To Second Addressed Account
End

FIG. 5

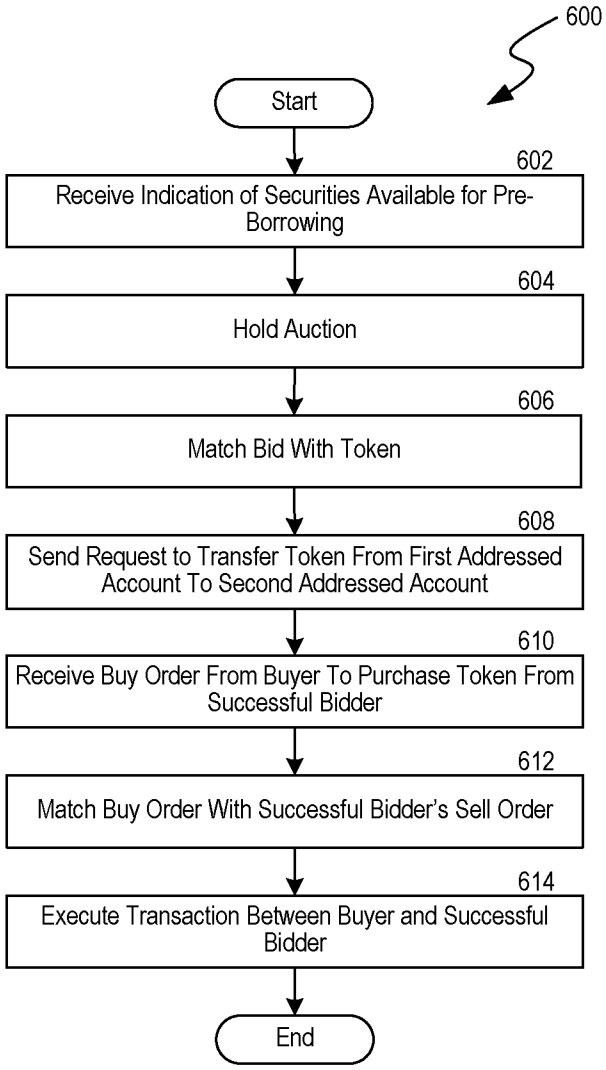

600
Start
602
Receive Indication of Securities Available for Pre-Borrowing
604
Hold Auction
606
Match Bid With Token
608
Send Request to Transfer Token From First Addressed Account To Second Addressed Account
610
Receive Buy Order From Buyer To Purchase Token From Successful Bidder
612
Match Buy Order With Successful Bidder's Sell Order
614
Execute Transaction Between Buyer and Successful Bidder
End

FIG. 6

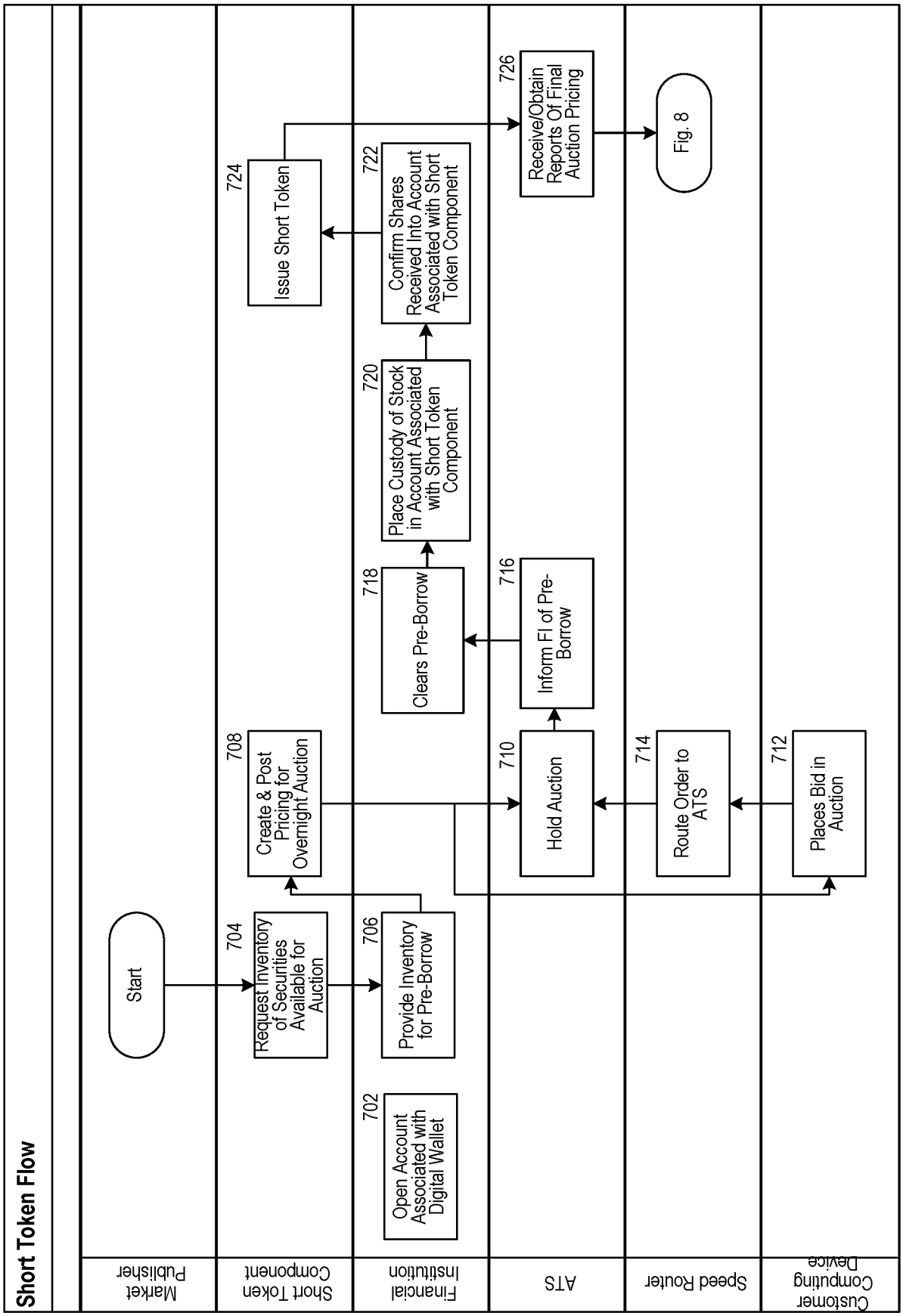

Short Token Flow
Market Publisher
Short Token Component
Financial Institution
ATS
Speed Router
Customer Computing Device
Start
Request Inventory of Securities Available for Auction
704
Provide Inventory for Pre-Borrow
706
Open Account Associated with Digital Wallet
702
Create & Post Pricing for Overnight Auction
708
Hold Auction
710
Route Order to ATS
714
Places Bid in Auction
712
Clears Pre-Borrow
718
Inform FI of Pre-Borrow
716
Place Custody of Stock in Account Associated with Short Token Component
720
Confirm Shares Received Into Account Associated with Short Token Component
722
Issue Short Token
724
Receive/Obtain Reports Of Final Auction Pricing
726
Fig. 8

FIG. 7

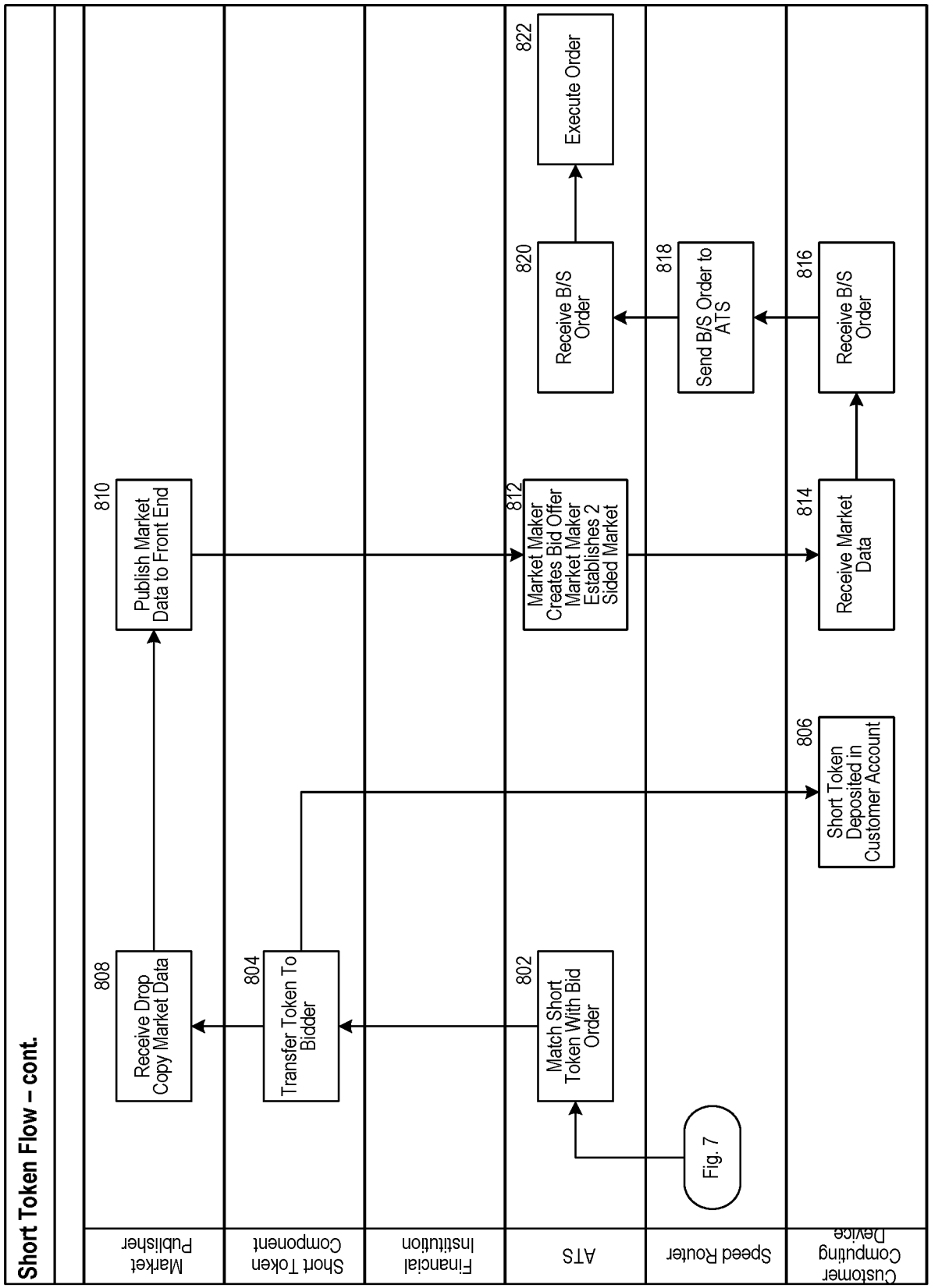

Short Token Flow – cont.
Market Publisher
Short Token Component
Financial Institution
ATS
Speed Router
Customer Computing Device
808
Receive Drop Copy Market Data
804
Transfer Token To Bidder
802
Match Short Token With Bid Order
Fig. 7
810
Publish Market Data to Front End
812
Market Maker Creates Bid Offer Market Maker Establishes 2 Sided Market
820
Receive B/S Order
822
Execute Order
818
Send B/S Order to ATS
816
Receive B/S Order
814
Receive Market Data
806
Short Token Deposited in Customer Account

FIG. 8

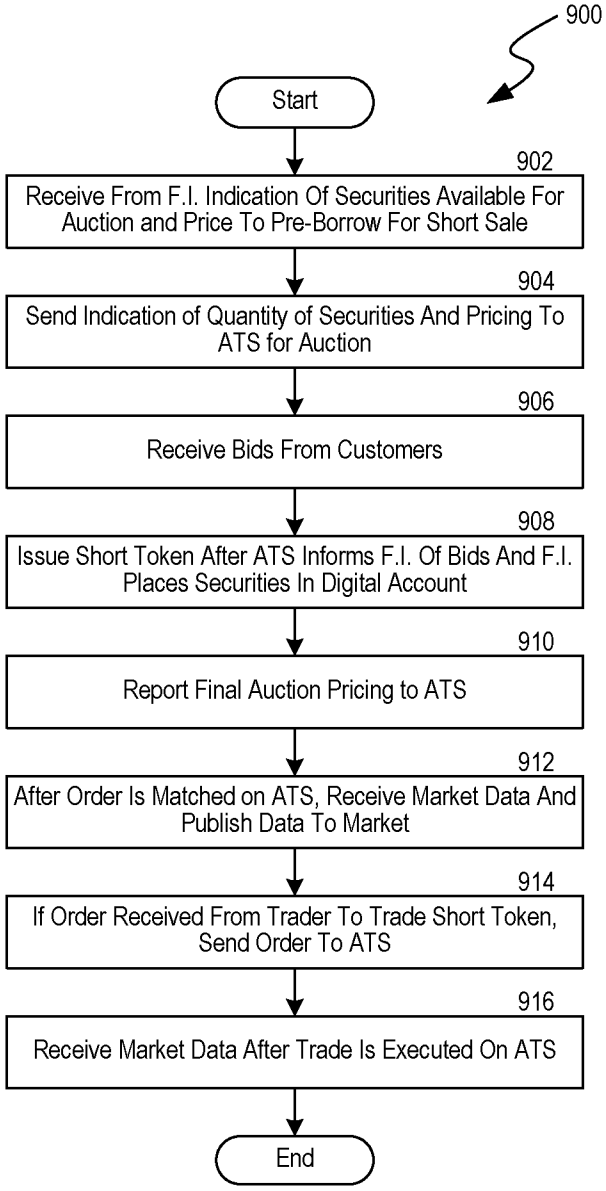

900
Start
902
Receive From F.I. Indication Of Securities Available For Auction and Price To Pre-Borrow For Short Sale
904
Send Indication of Quantity of Securities And Pricing To ATS for Auction
906
Receive Bids From Customers
908
Issue Short Token After ATS Informs F.I. Of Bids And F.I. Places Securities In Digital Account
910
Report Final Auction Pricing to ATS
912
After Order Is Matched on ATS, Receive Market Data And Publish Data To Market
914
If Order Received From Trader To Trade Short Token, Send Order To ATS
916
Receive Market Data After Trade Is Executed On ATS
End

FIG. 9

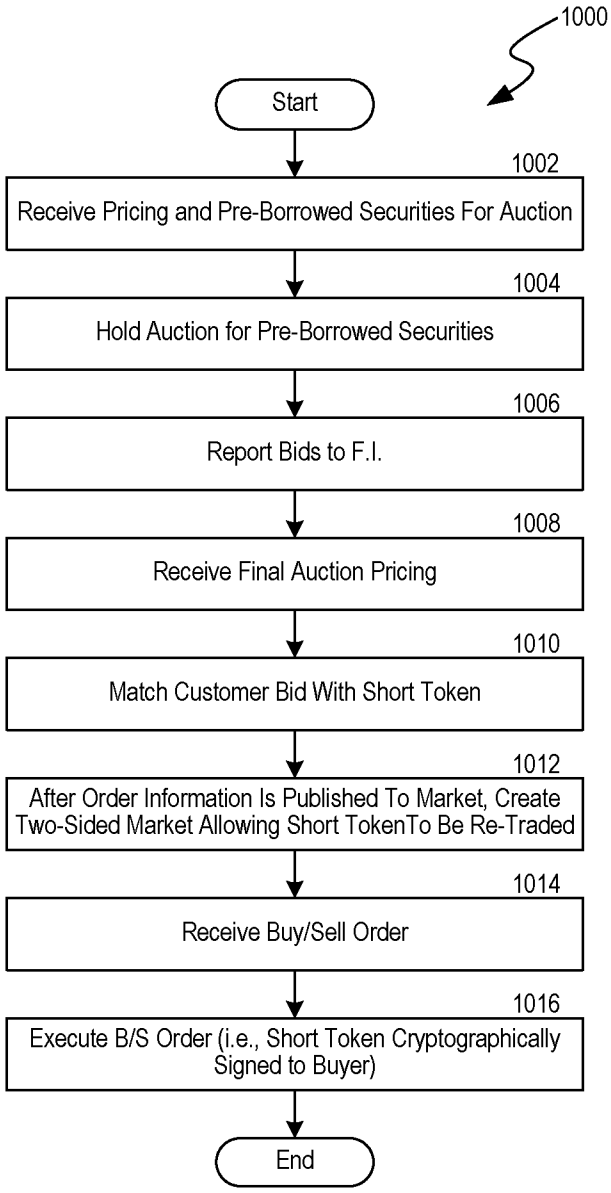

1000
Start
1002
Receive Pricing and Pre-Borrowed Securities For Auction
1004
Hold Auction for Pre-Borrowed Securities
1006
Report Bids to F.I.
1008
Receive Final Auction Pricing
1010
Match Customer Bid With Short Token
1012
After Order Information Is Published To Market, Create Two-Sided Market Allowing Short TokenTo Be Re-Traded
1014
Receive Buy/Sell Order
1016
Execute B/S Order (i.e., Short Token Cryptographically Signed to Buyer)
End

FIG. 10

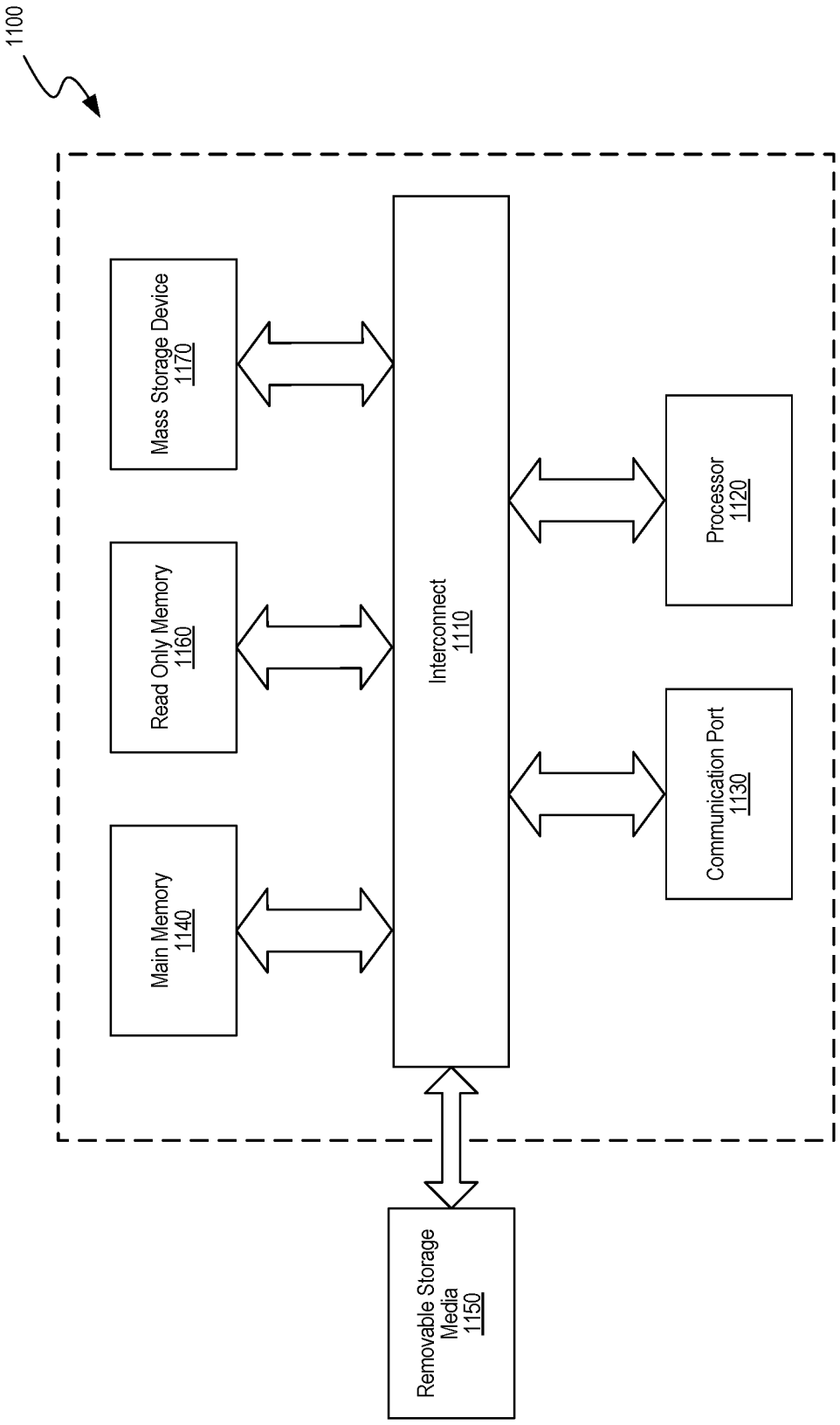

1100
Mass Storage Device
1170
Read Only Memory
1160
Main Memory
1140
Interconnect
1110
Processor
1120
Communication Port
1130
Removable Storage
Media
1150

FIG. 11