FIG. 1

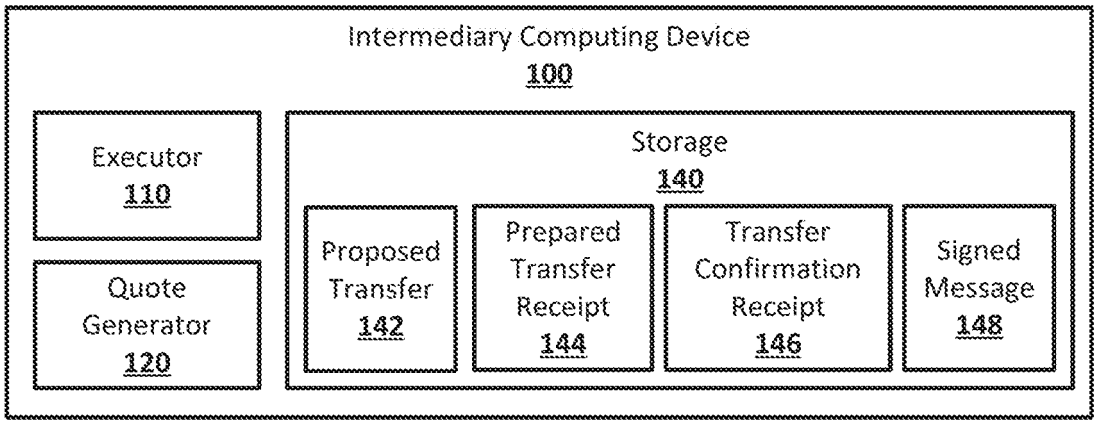


FIG. 2

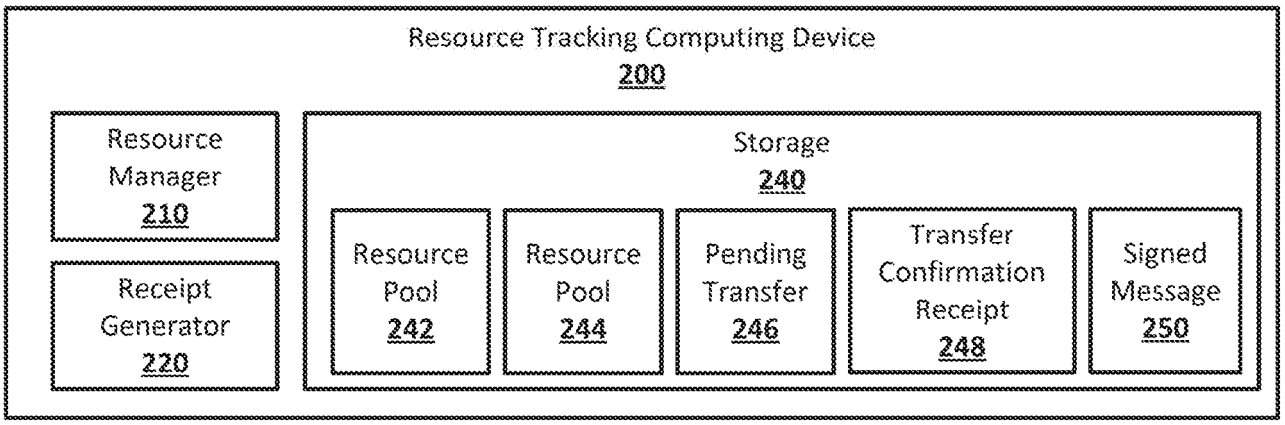


FIG. 3

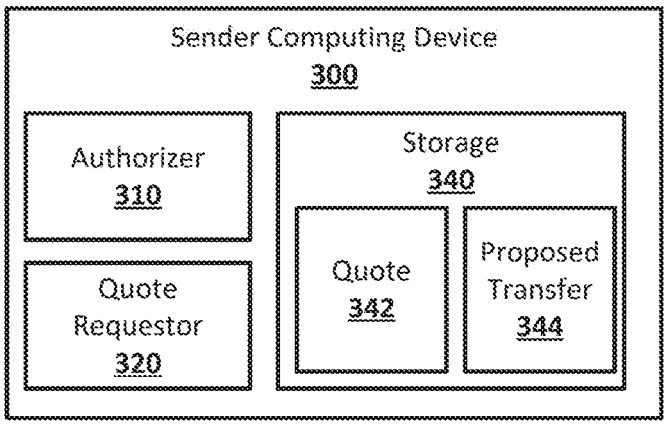


FIG. 4

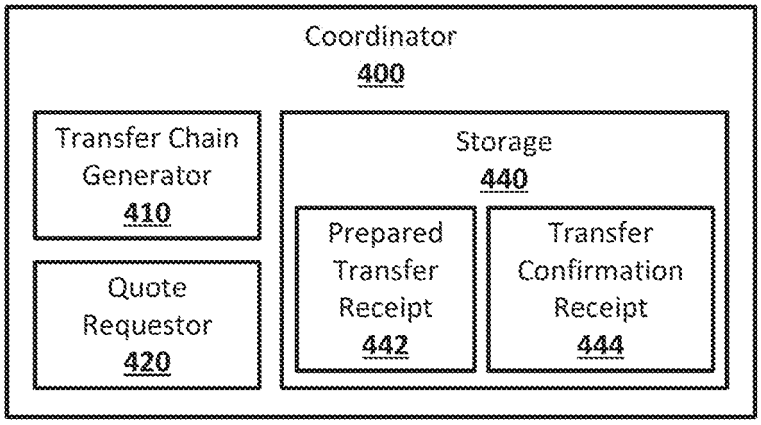

Coordinator
400
Transfer Chain Generator
410
Quote Requestor
420
Storage
440
Prepared Transfer Receipt
442
Transfer Confirmation Receipt
444

FIG. 5

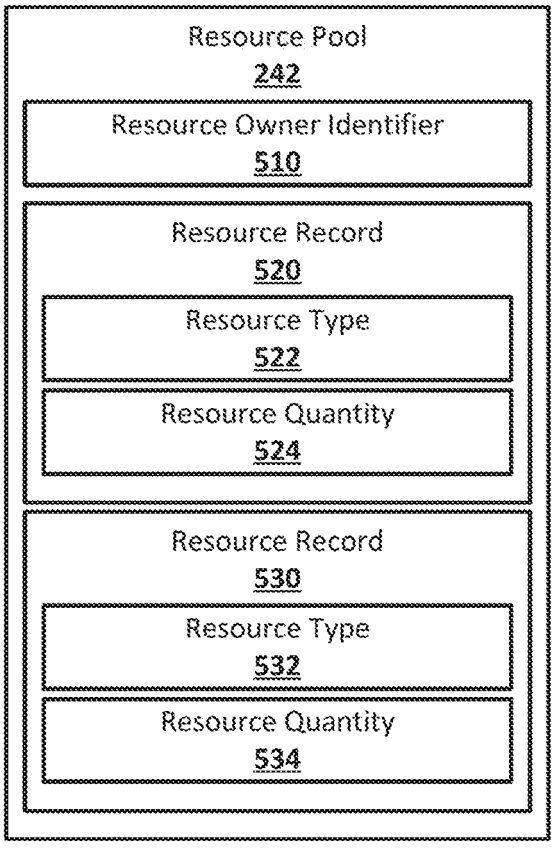

Resource Pool
242
Resource Owner Identifier
510
Resource Record
520
Resource Type
522
Resource Quantity
524
Resource Record
530
Resource Type
532
Resource Quantity
534

FIG. 6A

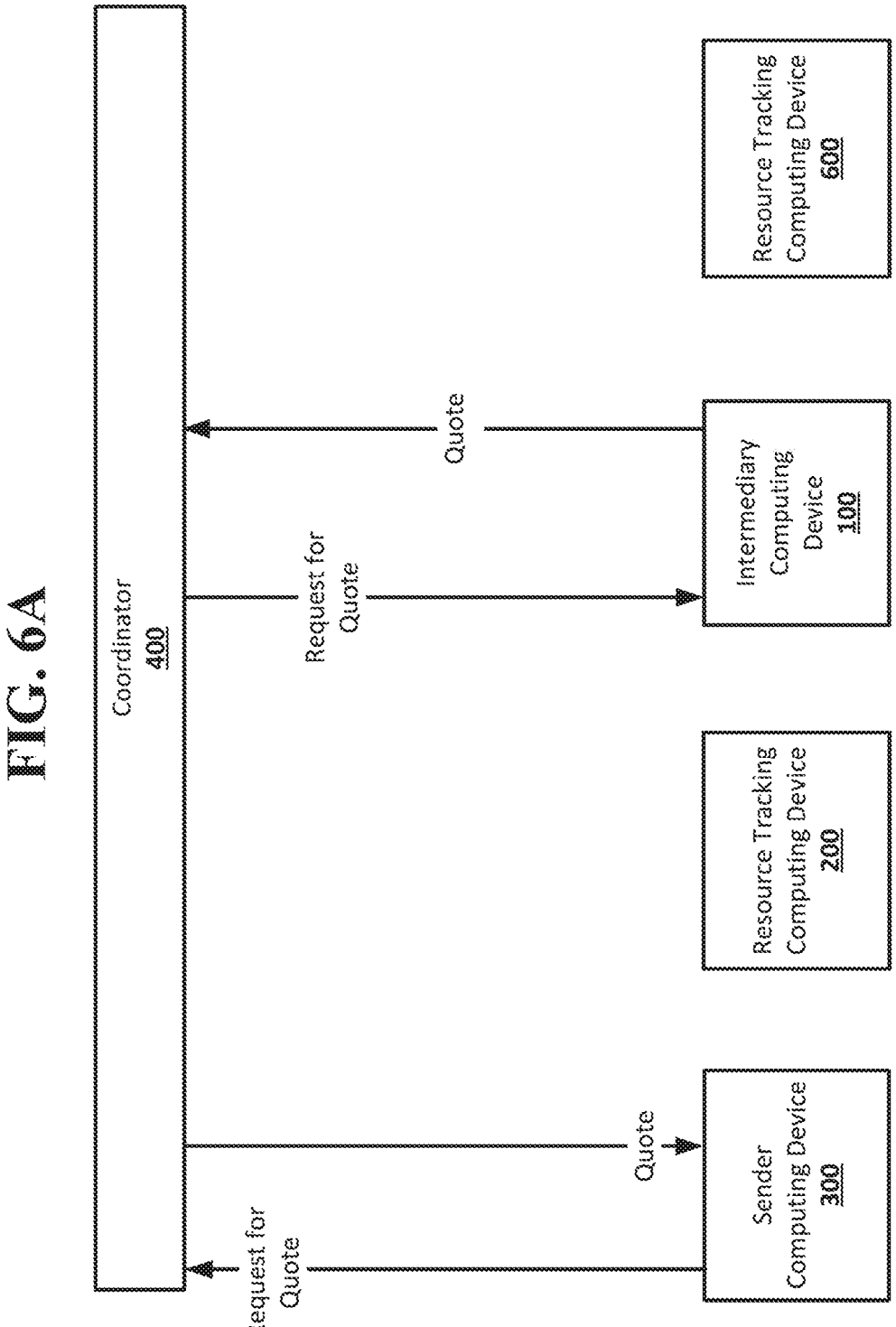

Coordinator
400
Request for Quote
Quote
Request for Quote
Quote
Request for Quote
Quote
Sender Computing Device
300
Resource Tracking Computing Device
200
Intermediary Computing Device
100
Resource Tracking Computing Device
600

FIG. 6B

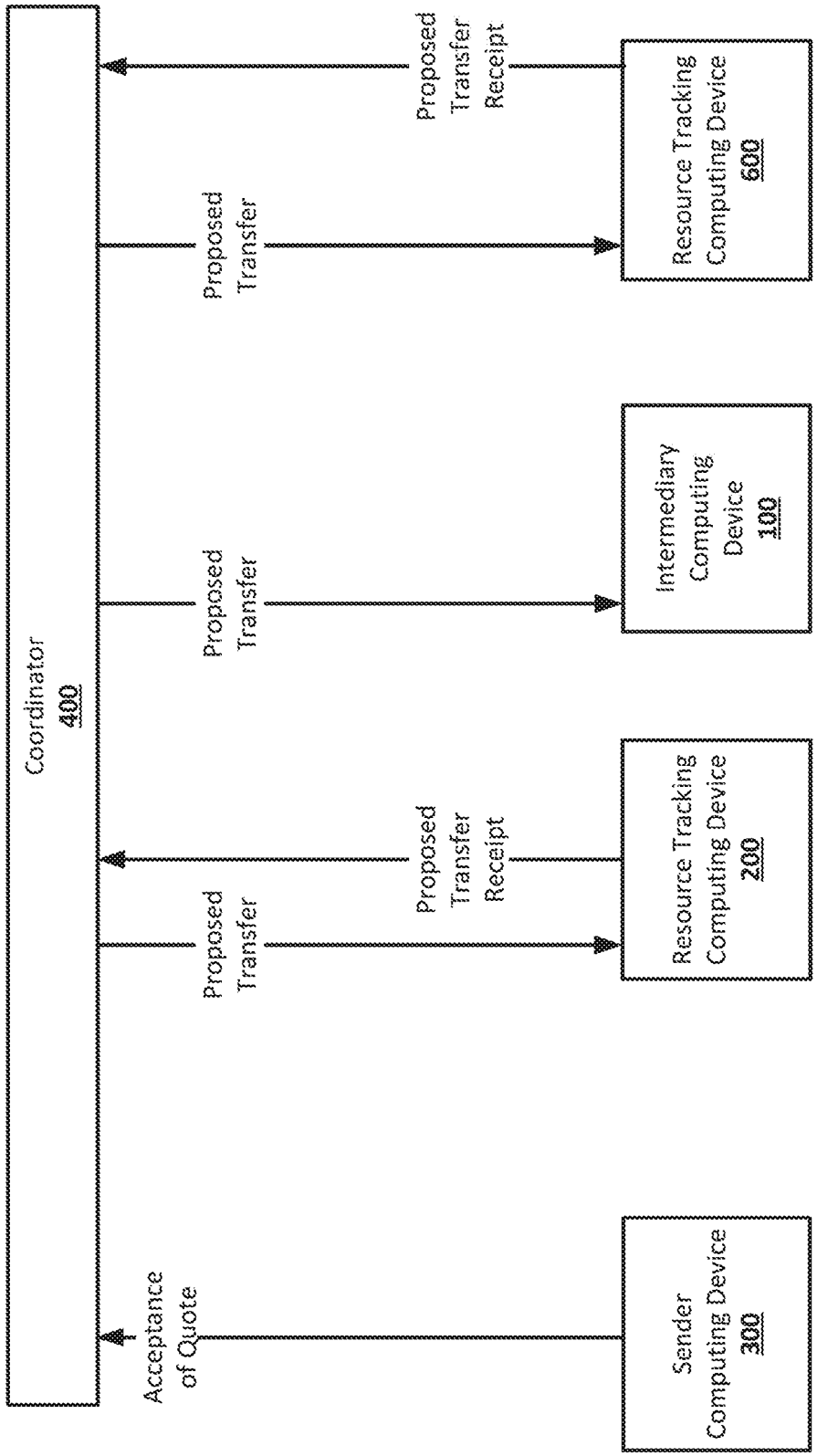

Coordinator
400
Acceptance of Quote
Sender Computing Device
300
Proposed Transfer
Proposed Transfer Receipt
Resource Tracking Computing Device
200
Proposed Transfer
Intermediary Computing Device
100
Proposed Transfer
Proposed Transfer Receipt
Resource Tracking Computing Device
600

FIG. 6C

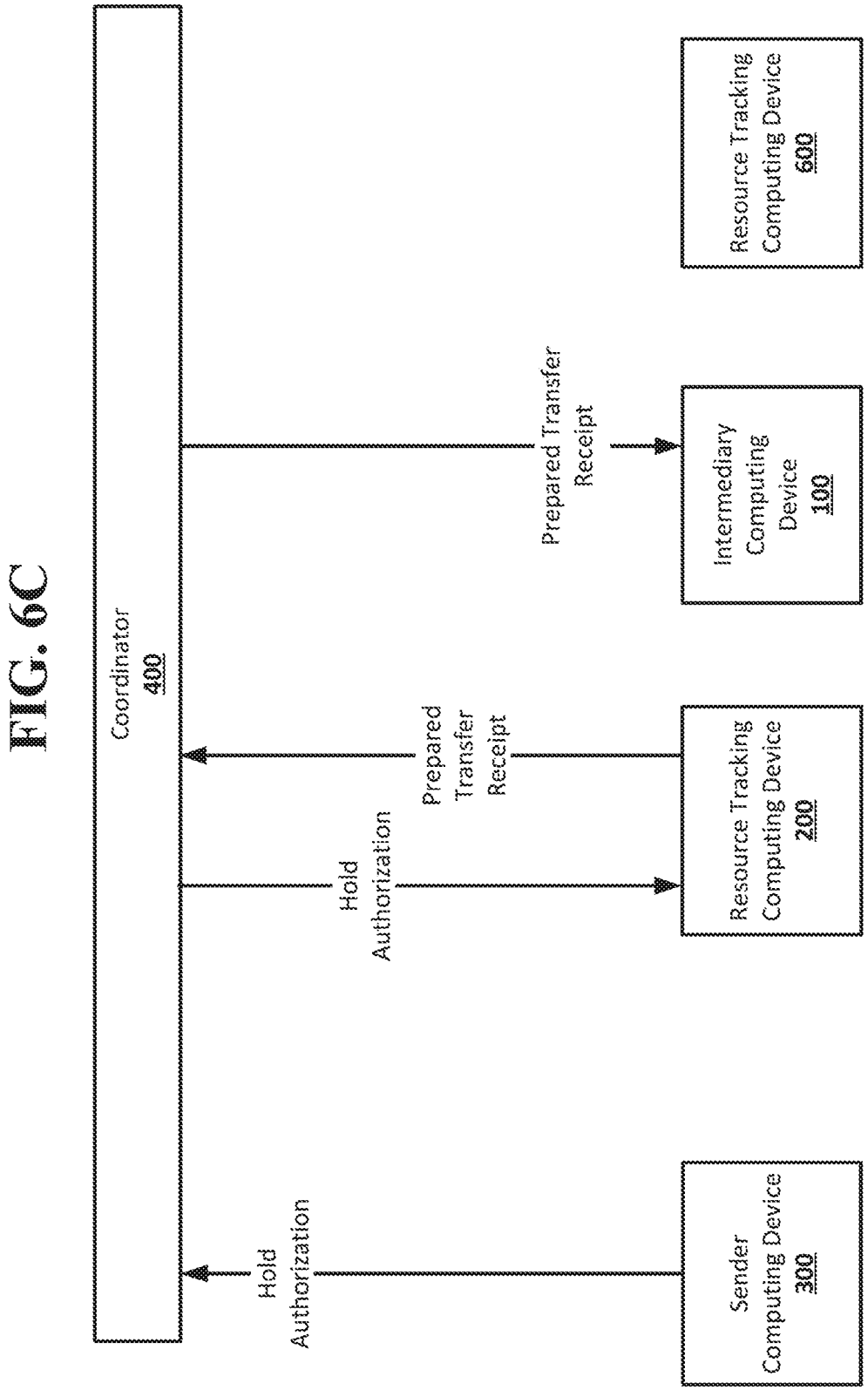

Coordinator
400
Hold Authorization
Sender Computing Device
300
Hold Authorization
Prepared Transfer Receipt
Resource Tracking Computing Device
200
Prepared Transfer Receipt
Intermediary Computing Device
100
Resource Tracking Computing Device
600

FIG. 6D

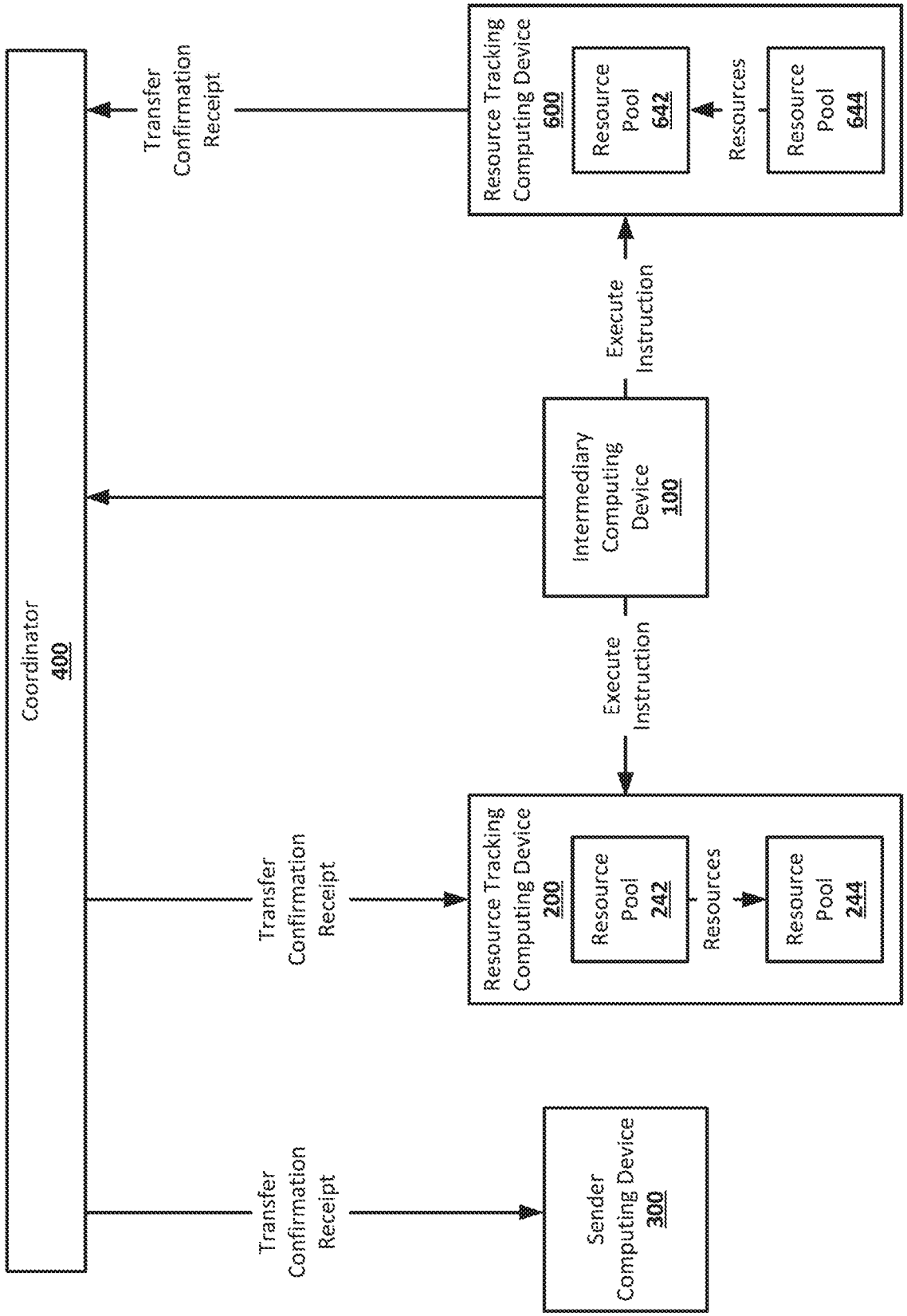

Coordinator
400
Transfer Confirmation Receipt
Resource Tracking Computing Device
600
Resource Pool
642
Resources
Resource Pool
644
Execute Instruction
Intermediary Computing Device
100
Execute Instruction
Transfer Confirmation Receipt
Resource Tracking Computing Device
200
Resource Pool
242
Resources
Resource Pool
244
Transfer Confirmation Receipt
Sender Computing Device
300

FIG. 7A

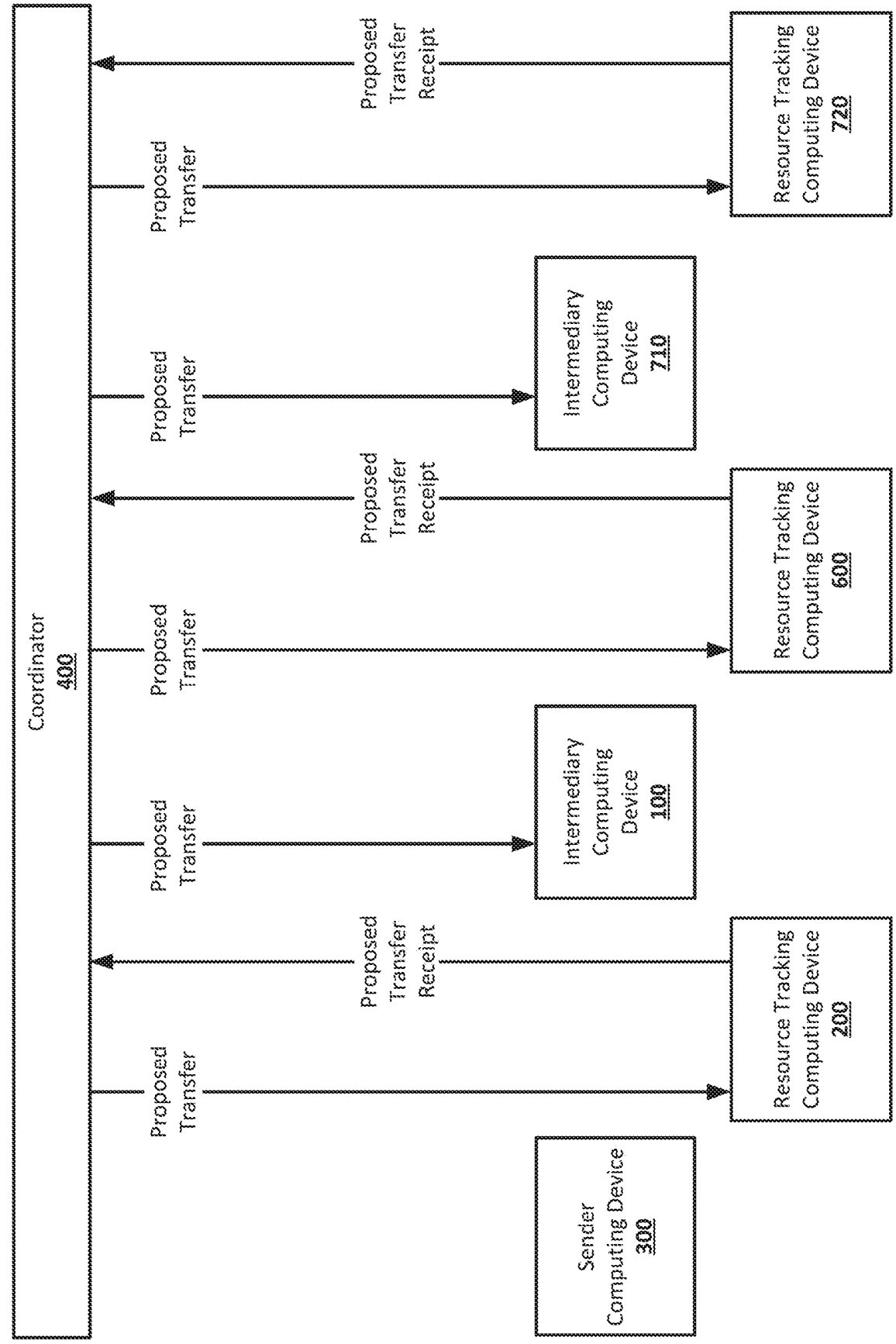

Coordinator
400
Sender
Computing Device
300
Proposed
Transfer
Proposed
Transfer
Receipt
Intermediary
Computing
Device
100
Resource Tracking
Computing Device
200
Intermediary
Computing
Device
710
Resource Tracking
Computing Device
600
Resource Tracking
Computing Device
720

FIG. 7B

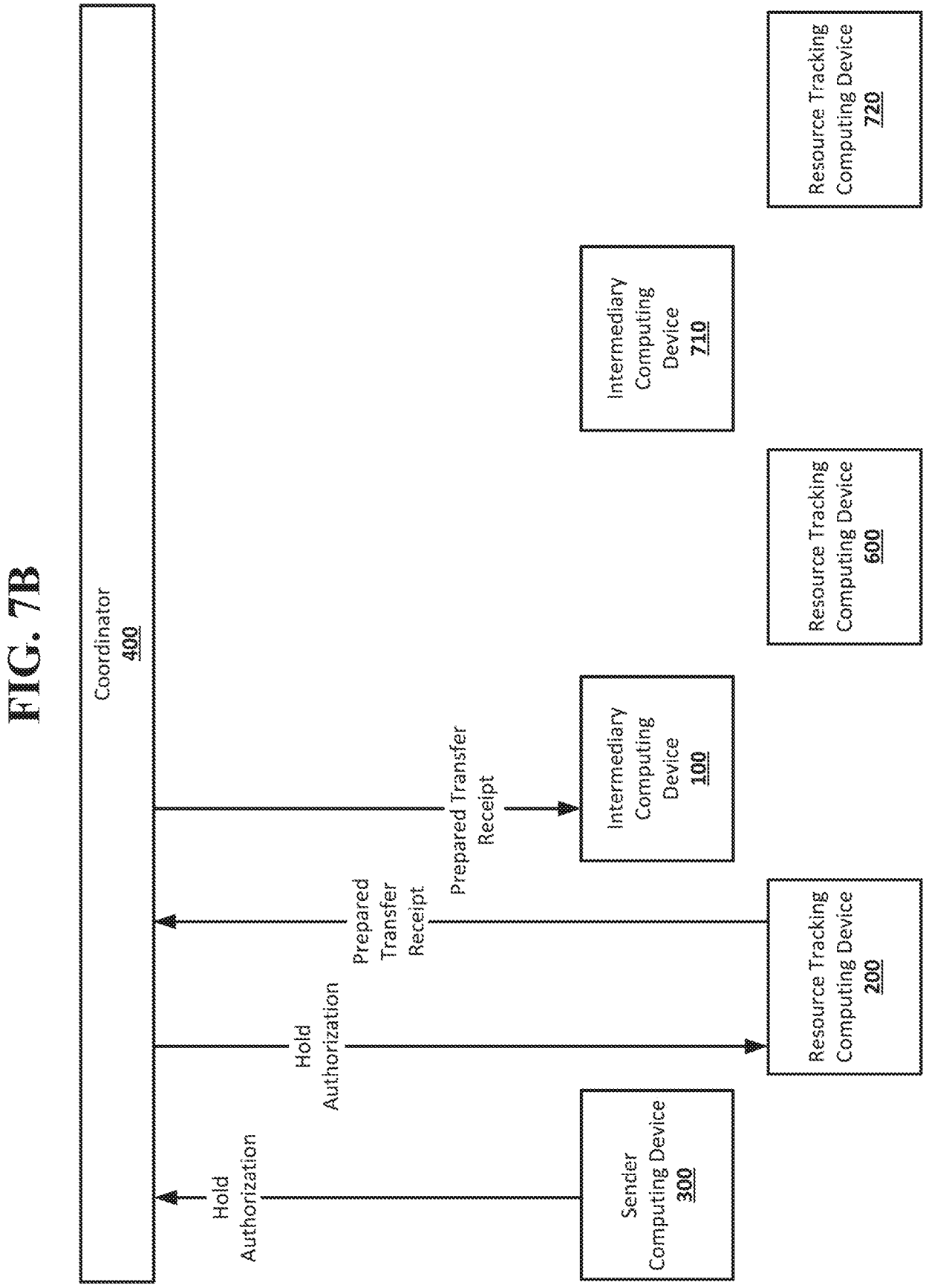

Coordinator
400
Hold
Authorization
Hold
Authorization
Prepared
Transfer
Receipt
Prepared Transfer
Receipt
Sender
Computing Device
300
Resource Tracking
Computing Device
200
Intermediary
Computing
Device
100
Intermediary
Computing
Device
710
Resource Tracking
Computing Device
600
Resource Tracking
Computing Device
720

FIG. 7C

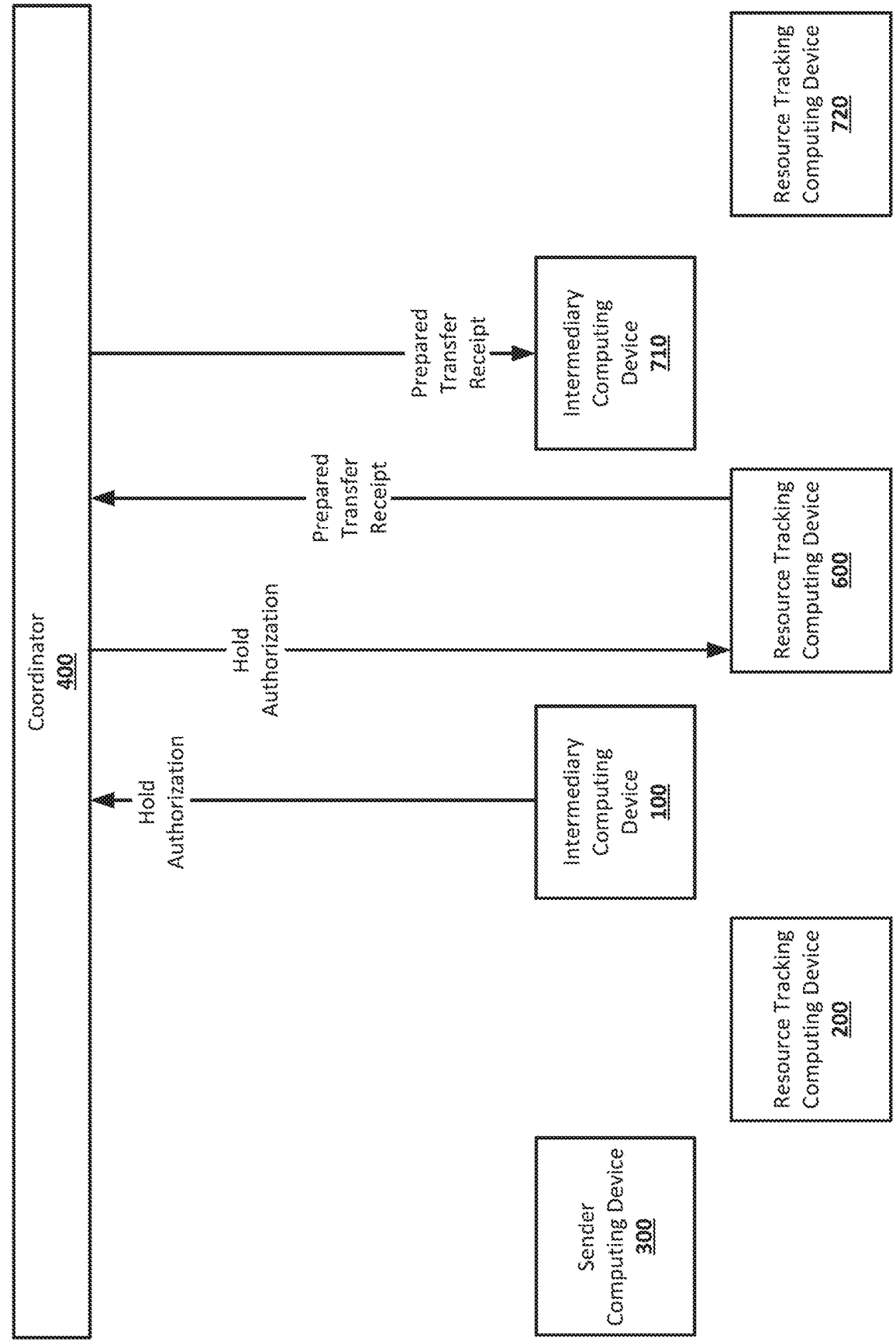

Coordinator
400
Hold Authorization
Intermediary Computing Device
100
Hold Authorization
Resource Tracking Computing Device
600
Prepared Transfer Receipt
Intermediary Computing Device
710
Prepared Transfer Receipt
Resource Tracking Computing Device
720
Sender Computing Device
300
Resource Tracking Computing Device
200

FIG. 8A

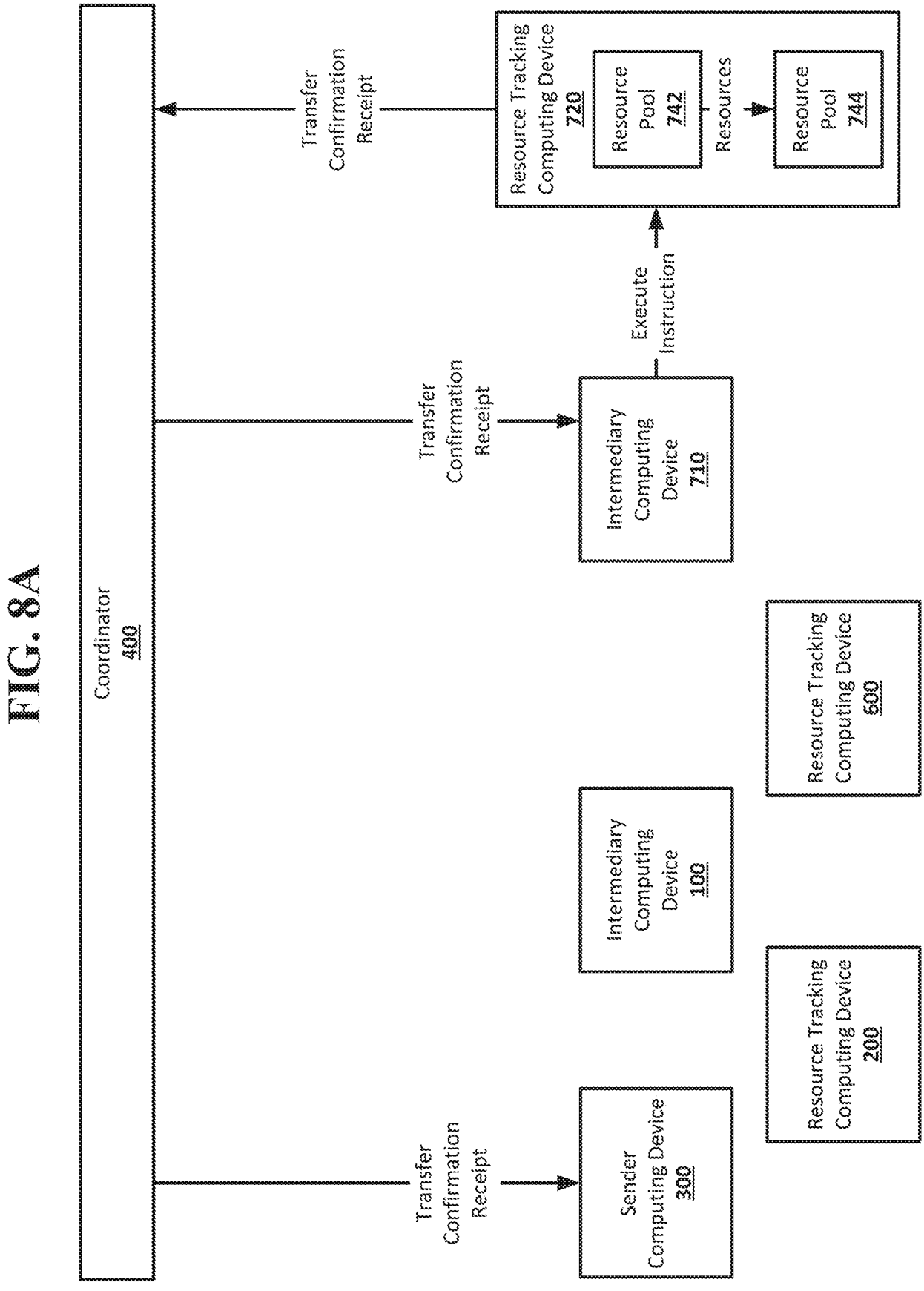

Coordinator
400
Transfer Confirmation Receipt
Resource Tracking Computing Device
720
Resource Pool
742
Resources
Resource Pool
744
Transfer Confirmation Receipt
Intermediary Computing Device
710
Execute Instruction
Transfer Confirmation Receipt
Sender Computing Device
300
Intermediary Computing Device
100
Resource Tracking Computing Device
600
Resource Tracking Computing Device
200

FIG. 8B

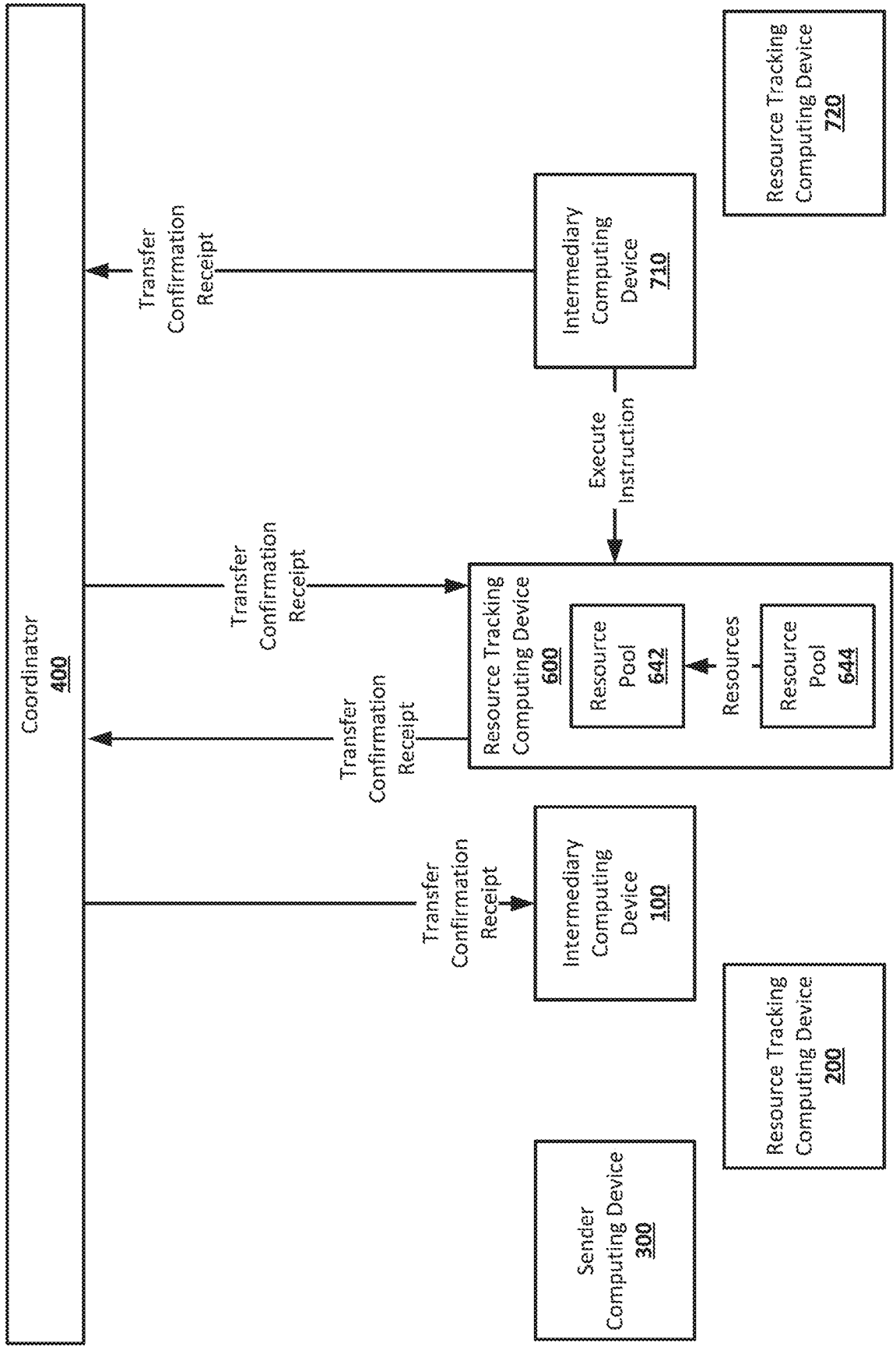

Coordinator
400
Transfer Confirmation Receipt
Transfer Confirmation Receipt
Transfer Confirmation Receipt
Transfer Confirmation Receipt
Intermediary Computing Device
710
Execute Instruction
Resource Tracking Computing Device
720
Resource Tracking Computing Device
600
Resource Pool
642
Resources
Resource Pool
644
Intermediary Computing Device
100
Sender Computing Device
300
Resource Tracking Computing Device
200

FIG. 8C

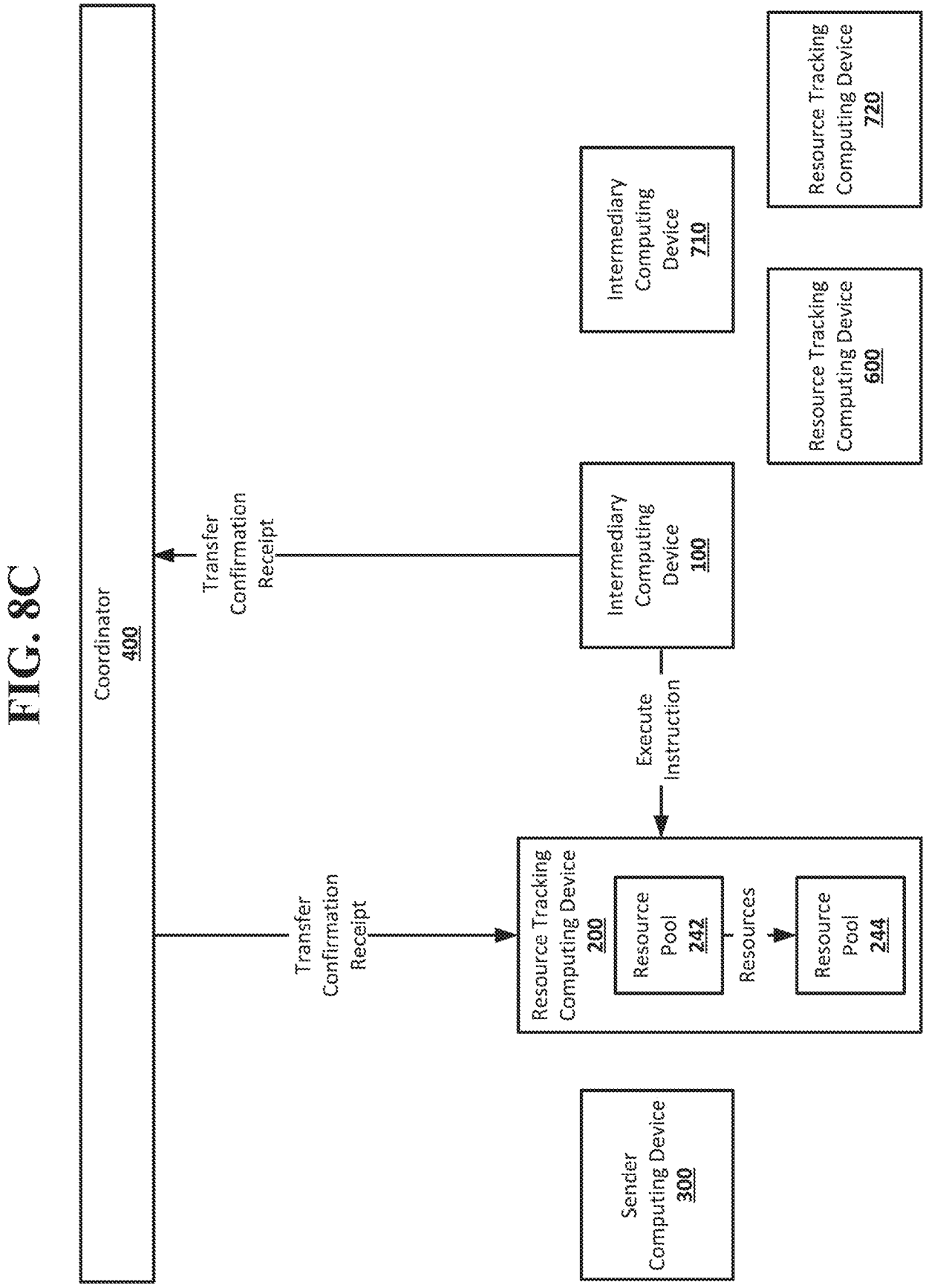

Coordinator
400
Transfer Confirmation Receipt
Intermediary Computing Device
100
Intermediary Computing Device
710
Resource Tracking Computing Device
720
Resource Tracking Computing Device
600
Execute Instruction
Transfer Confirmation Receipt
Resource Tracking Computing Device
200
Resource Pool
242
Resources
Resource Pool
244
Sender Computing Device
300

FIG. 9A

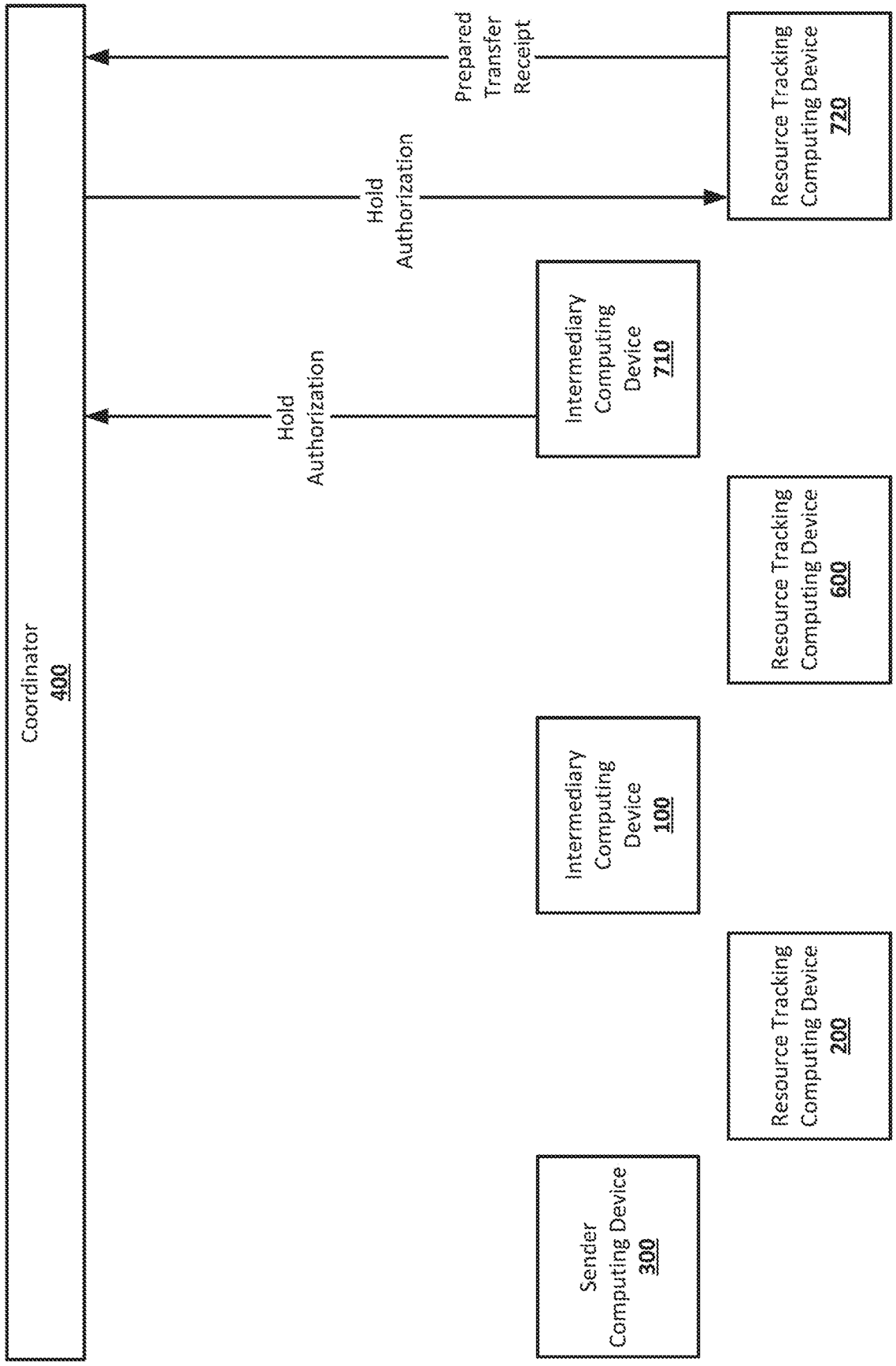

Coordinator
400
Hold Authorization
Hold Authorization
Prepared Transfer Receipt
Intermediary Computing Device
710
Resource Tracking Computing Device
720
Intermediary Computing Device
100
Resource Tracking Computing Device
600
Sender Computing Device
300
Resource Tracking Computing Device
200

FIG. 9B

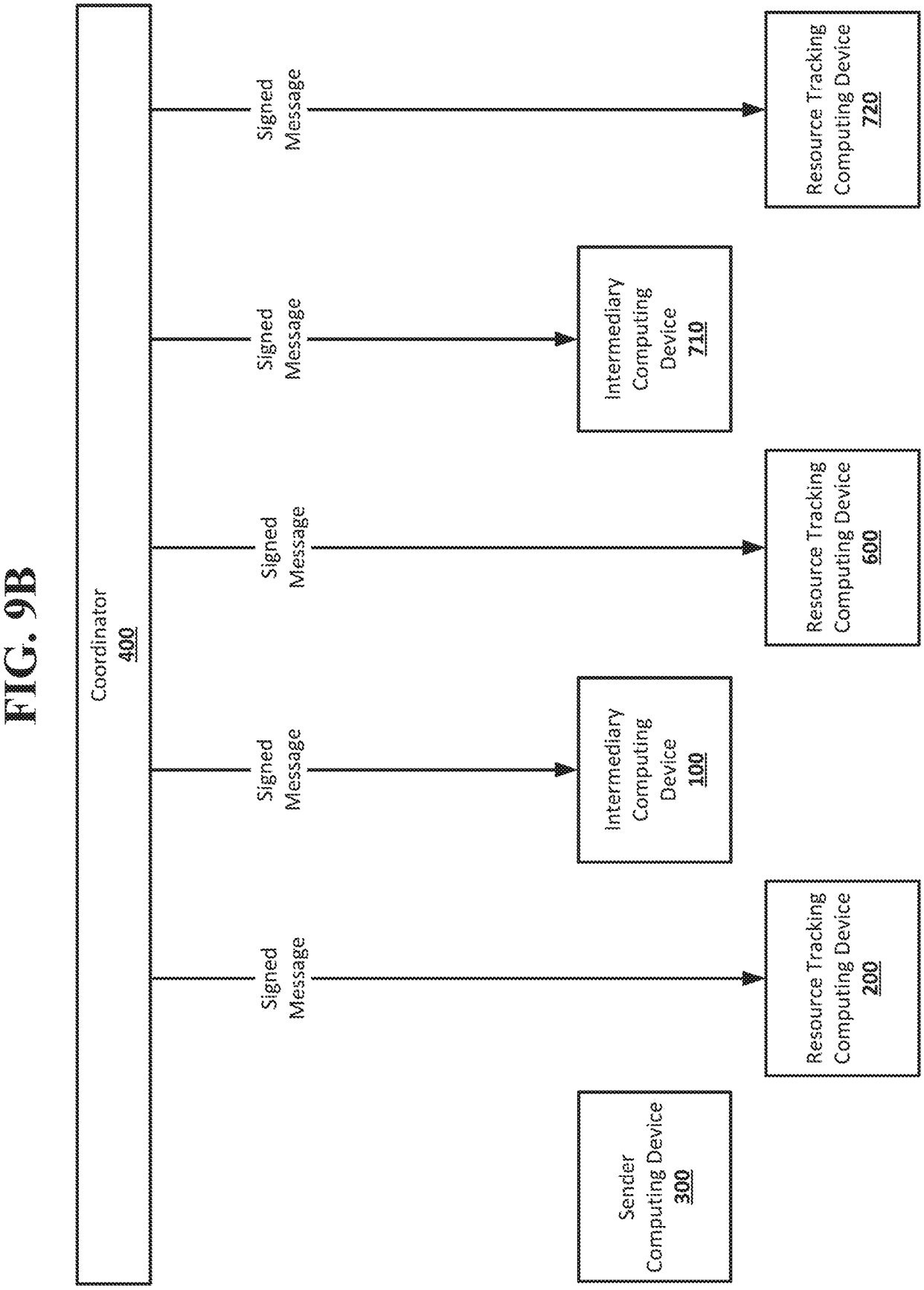

Coordinator
400
Signed Message
Signed Message
Signed Message
Signed Message
Resource Tracking Computing Device
720
Intermediary Computing Device
710
Resource Tracking Computing Device
600
Intermediary Computing Device
100
Resource Tracking Computing Device
200
Sender Computing Device
300

FIG. 9C

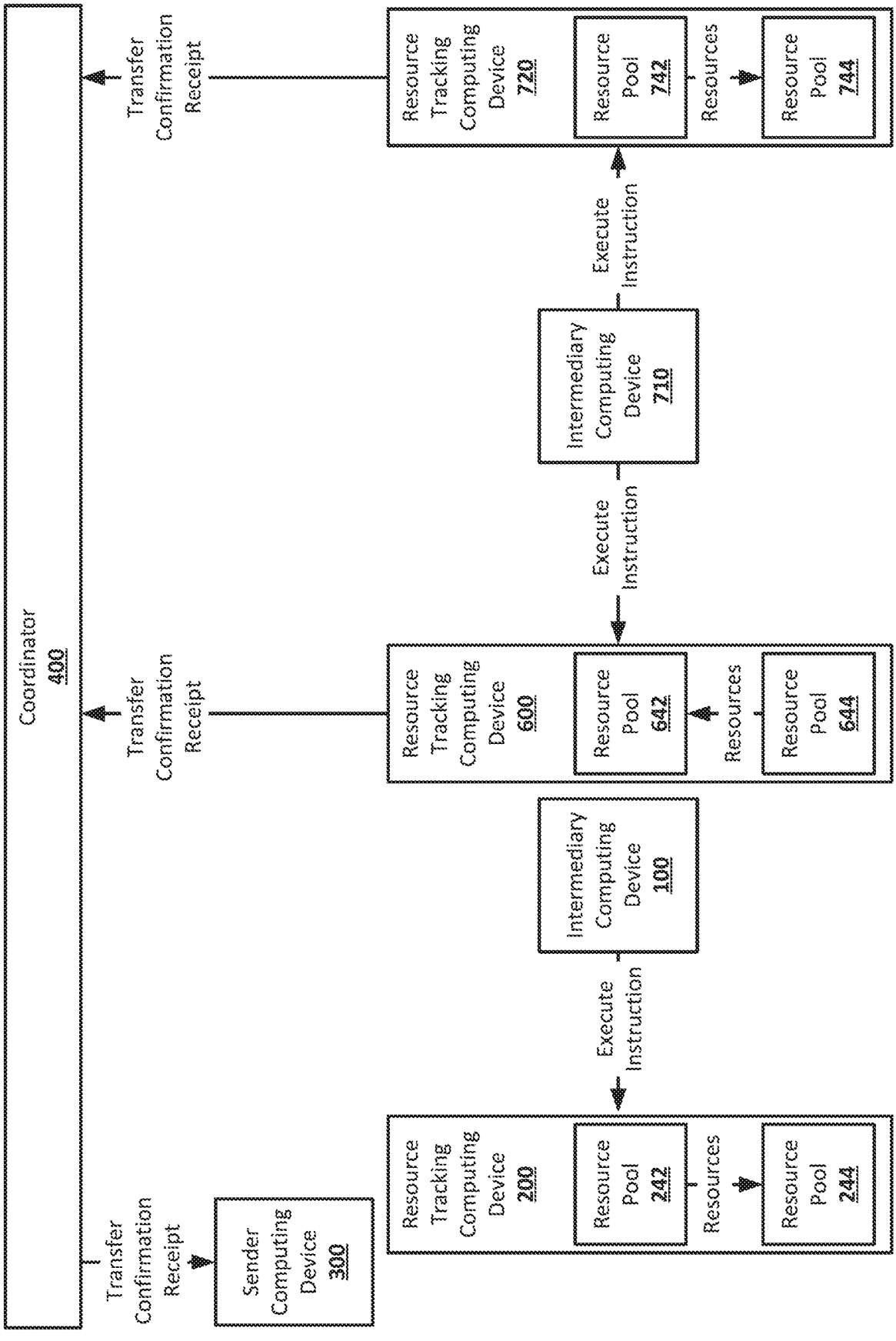

Coordinator
400
Transfer Confirmation Receipt
Sender Computing Device
300
Transfer Confirmation Receipt
Resource Tracking Computing Device
200
Resource Pool
242
Resources
Resource Pool
244
Execute Instruction
Intermediary Computing Device
100
Transfer Confirmation Receipt
Resource Tracking Computing Device
600
Resource Pool
642
Resources
Resource Pool
644
Execute Instruction
Intermediary Computing Device
710
Transfer Confirmation Receipt
Resource Tracking Computing Device
720
Resource Pool
742
Resources
Resource Pool
744
Execute Instruction

FIG. 10

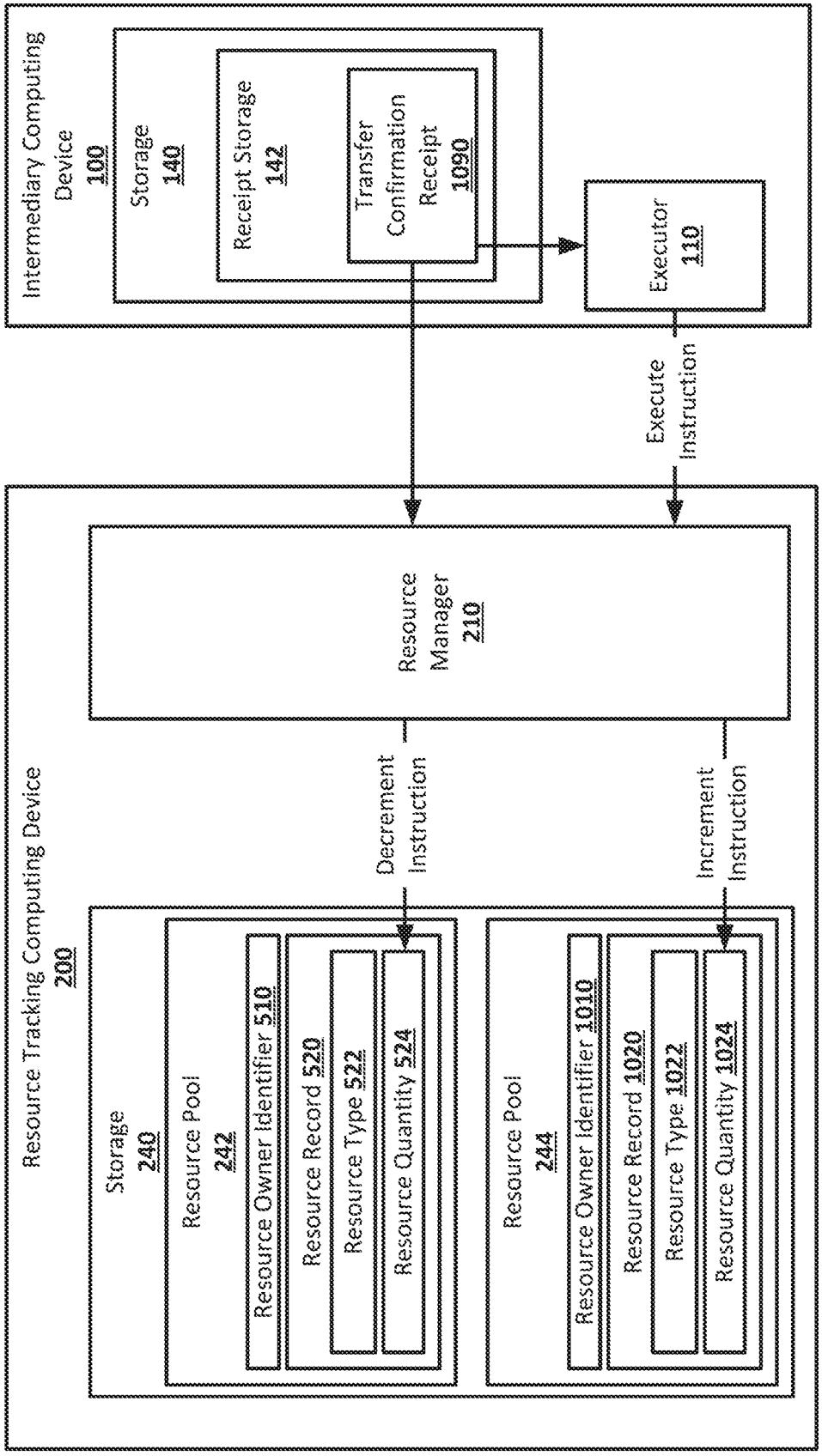

Intermediary Computing Device 100
Storage 140
Receipt Storage 142
Transfer Confirmation Receipt 1090
Executor 110
Execute Instruction
Resource Tracking Computing Device 200
Resource Manager 210
Decrement Instruction
Increment Instruction
Storage 240
Resource Pool 242
Resource Owner Identifier 510
Resource Record 520
Resource Type 522
Resource Quantity 524
Resource Pool 244
Resource Owner Identifier 1010
Resource Record 1020
Resource Type 1022
Resource Quantity 1024

FIG. 11

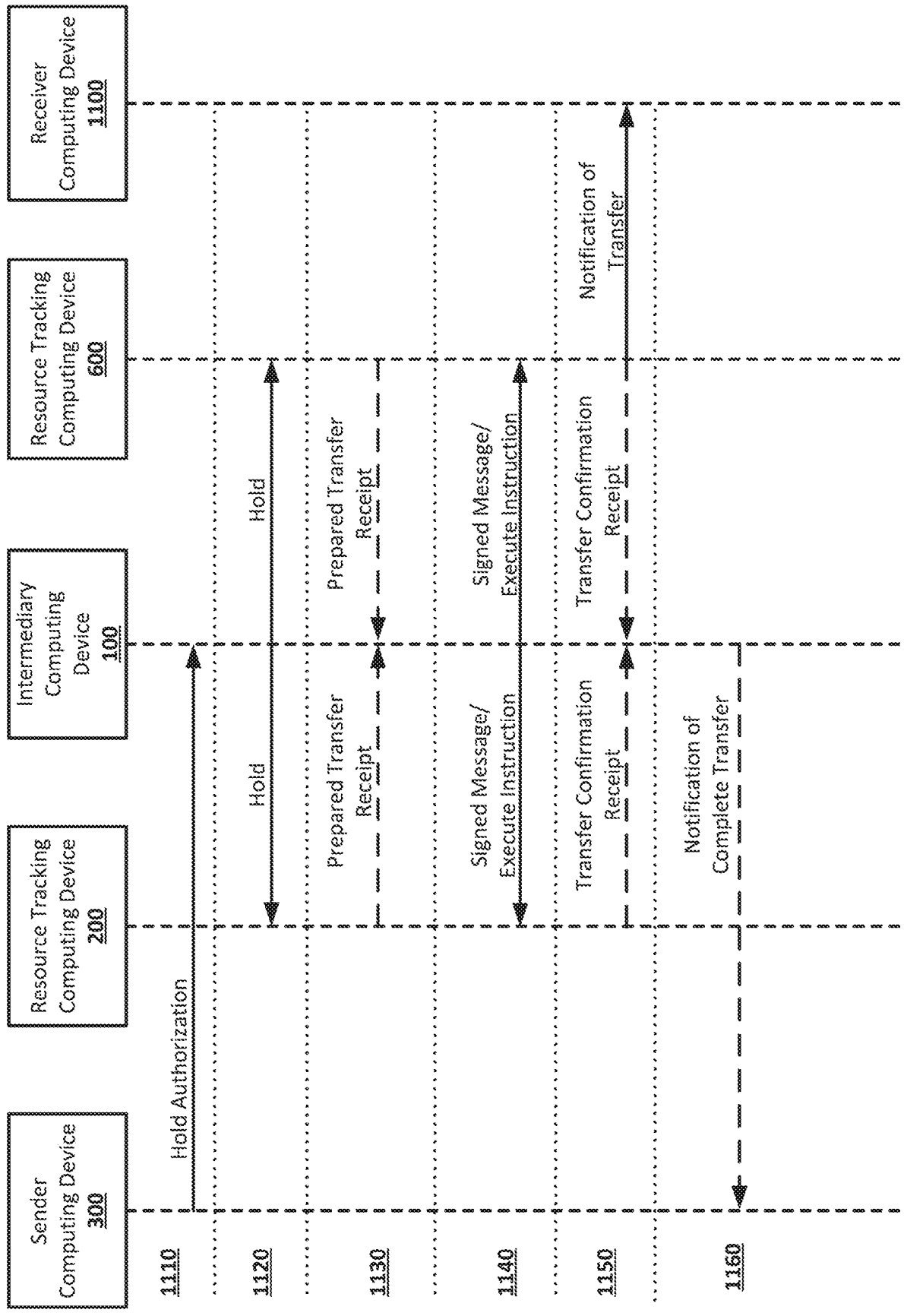

Sender Computing Device 300
Resource Tracking Computing Device 200
Intermediary Computing Device 100
Resource Tracking Computing Device 600
Receiver Computing Device 1100
1110
Hold Authorization
1120
Hold
Hold
1130
Prepared Transfer Receipt
Prepared Transfer Receipt
1140
Signed Message/ Execute Instruction
Signed Message/ Execute Instruction
1150
Transfer Confirmation Receipt
Transfer Confirmation Receipt
Notification of Transfer
1160
Notification of Complete Transfer

FIG. 12

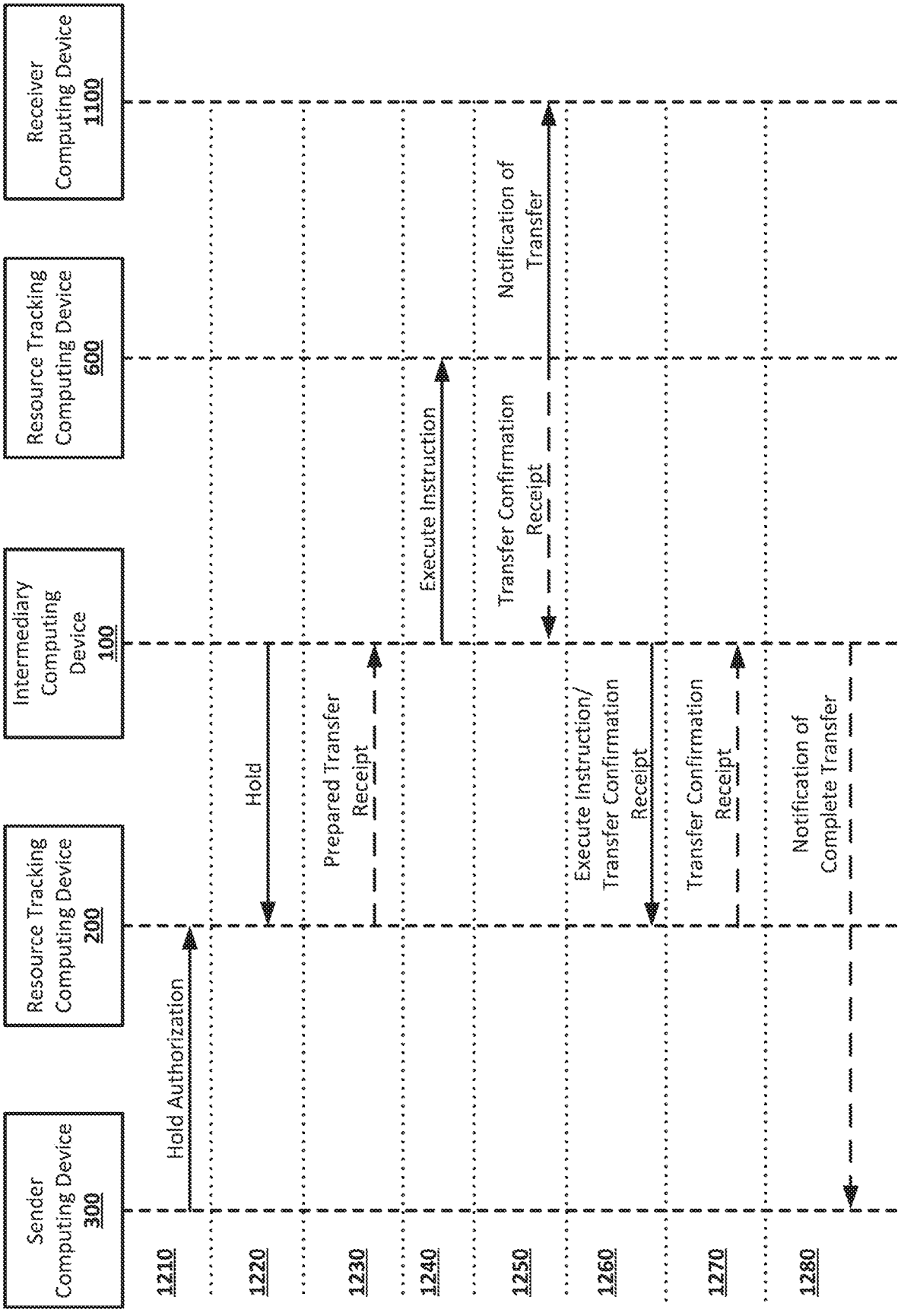

Sender Computing Device 300
Resource Tracking Computing Device 200
Intermediary Computing Device 100
Resource Tracking Computing Device 600
Receiver Computing Device 1100
1210
Hold Authorization
1220
Hold
1230
Prepared Transfer Receipt
1240
Execute Instruction
1250
Transfer Confirmation Receipt
Notification of Transfer
1260
Execute Instruction/ Transfer Confirmation Receipt
1270
Transfer Confirmation Receipt
1280
Notification of Complete Transfer

FIG. 13A

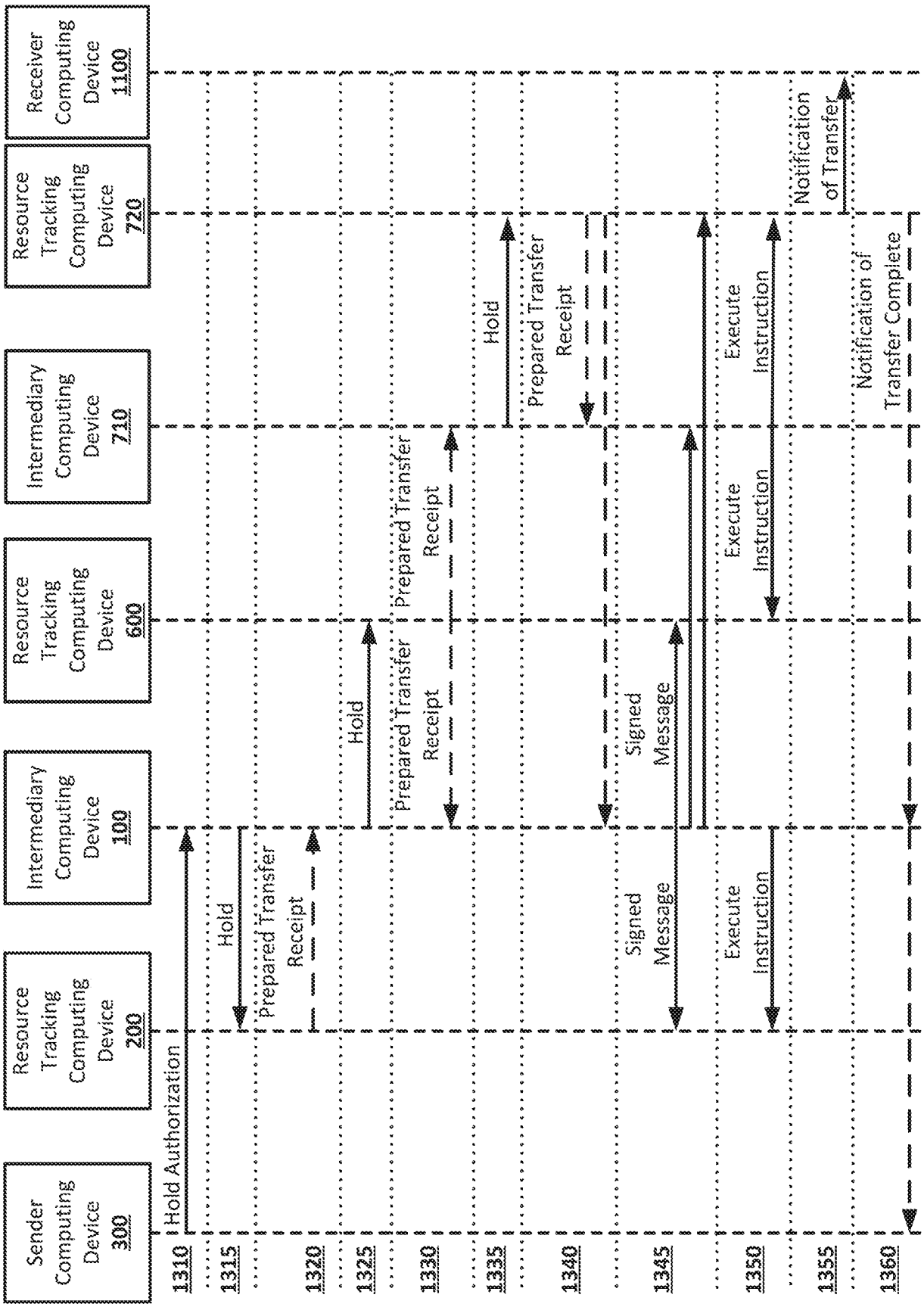

Sender Computing Device 300
Resource Tracking Computing Device 200
Intermediary Computing Device 100
Resource Tracking Computing Device 600
Intermediary Computing Device 710
Resource Tracking Computing Device 720
Receiver Computing Device 1100
1310
Hold Authorization
1315
Hold
1320
Prepared Transfer Receipt
1325
Hold
1330
Prepared Transfer Receipt
Prepared Transfer Receipt
1335
Hold
1340
Prepared Transfer Receipt
1345
Signed Message
Signed Message
1350
Execute Instruction
Execute Instruction
Execute Instruction
1355
Notification of Transfer
1360
Notification of Transfer Complete

FIG. 13B

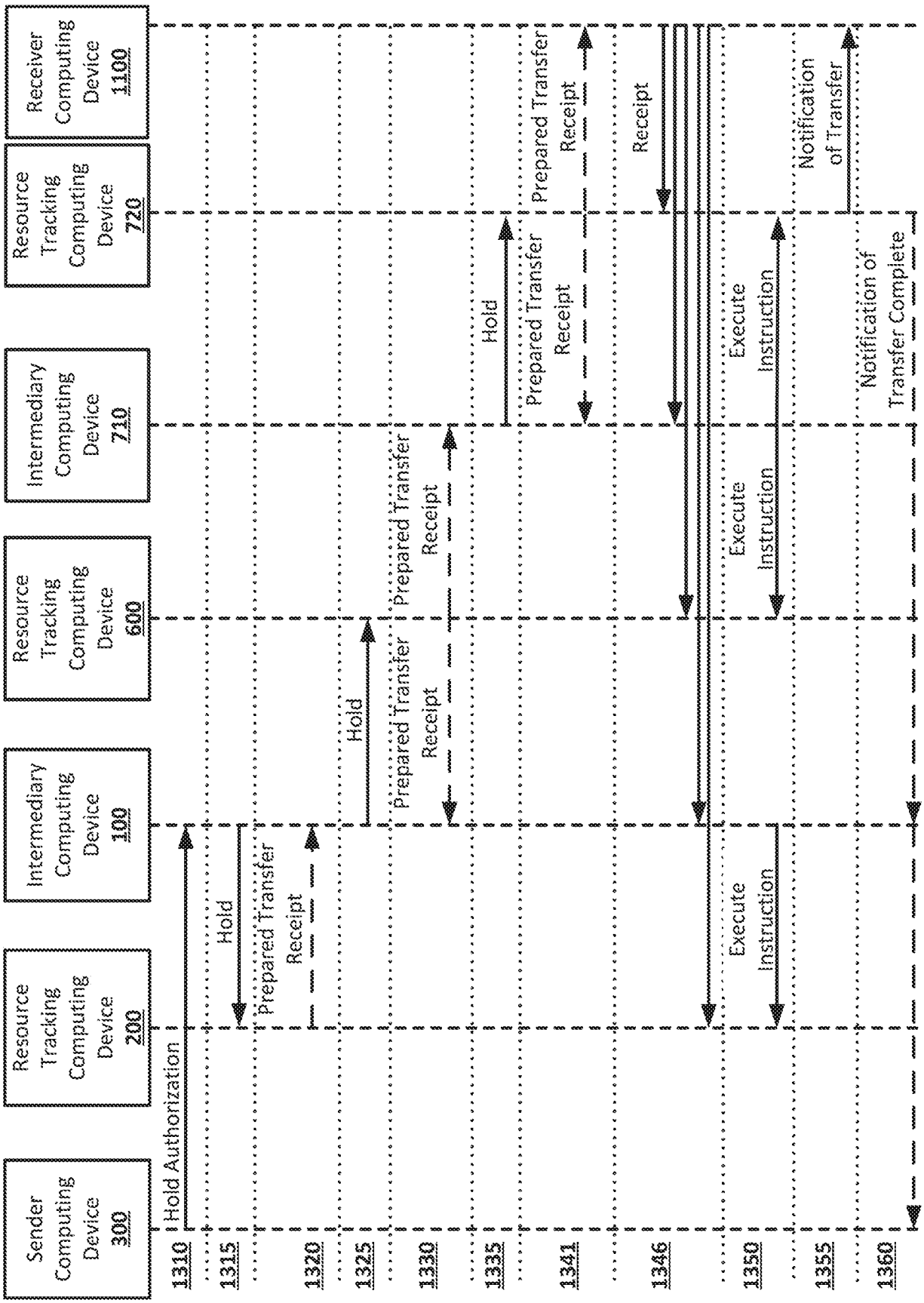

Sender Computing Device 300
Resource Tracking Computing Device 200
Intermediary Computing Device 100
Resource Tracking Computing Device 600
Intermediary Computing Device 710
Resource Tracking Computing Device 720
Receiver Computing Device 1100
1310
Hold Authorization
1315
Hold
1320
Prepared Transfer Receipt
1325
Hold
1330
Prepared Transfer Receipt
Prepared Transfer Receipt
1335
Hold
1341
Prepared Transfer Receipt
Prepared Transfer Receipt
1346
Receipt
Receipt
1350
Execute Instruction
Execute Instruction
Execute Instruction
1355
Notification of Transfer
1360
Notification of Transfer Complete

FIG. 14

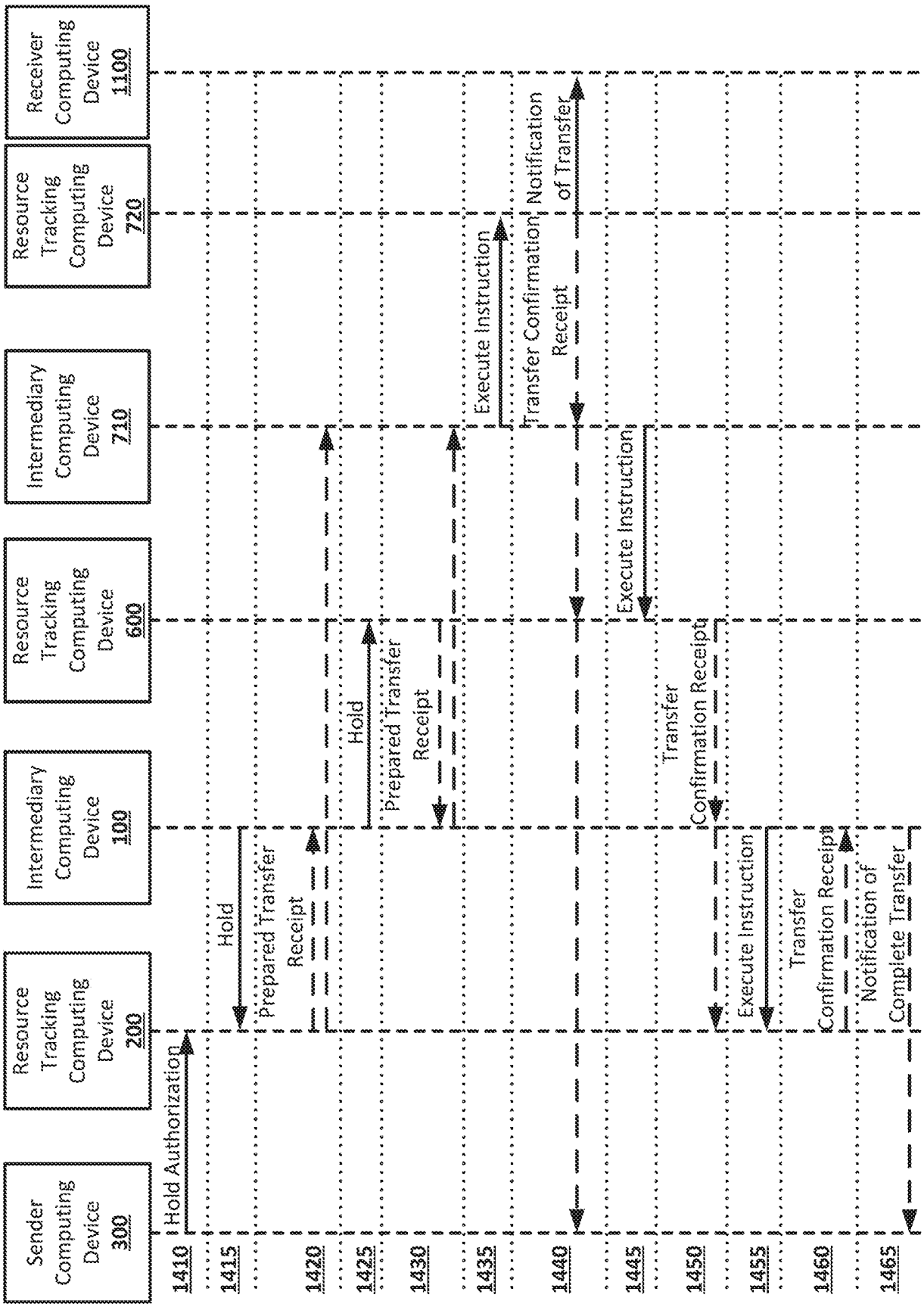

Sender Computing Device 300
Resource Tracking Computing Device 200
Intermediary Computing Device 100
Resource Tracking Computing Device 600
Intermediary Computing Device 710
Resource Tracking Computing Device 720
Receiver Computing Device 1100
1410 Hold Authorization
1415 Hold
1420 Prepared Transfer Receipt
1425 Hold
1430 Prepared Transfer Receipt
1435 Execute Instruction
1440 Transfer Confirmation Receipt
Notification of Transfer
1445 Execute Instruction
1450 Transfer Confirmation Receipt
1455 Execute Instruction
1460 Transfer Confirmation Receipt
1465 Notification of Complete Transfer

FIG. 15

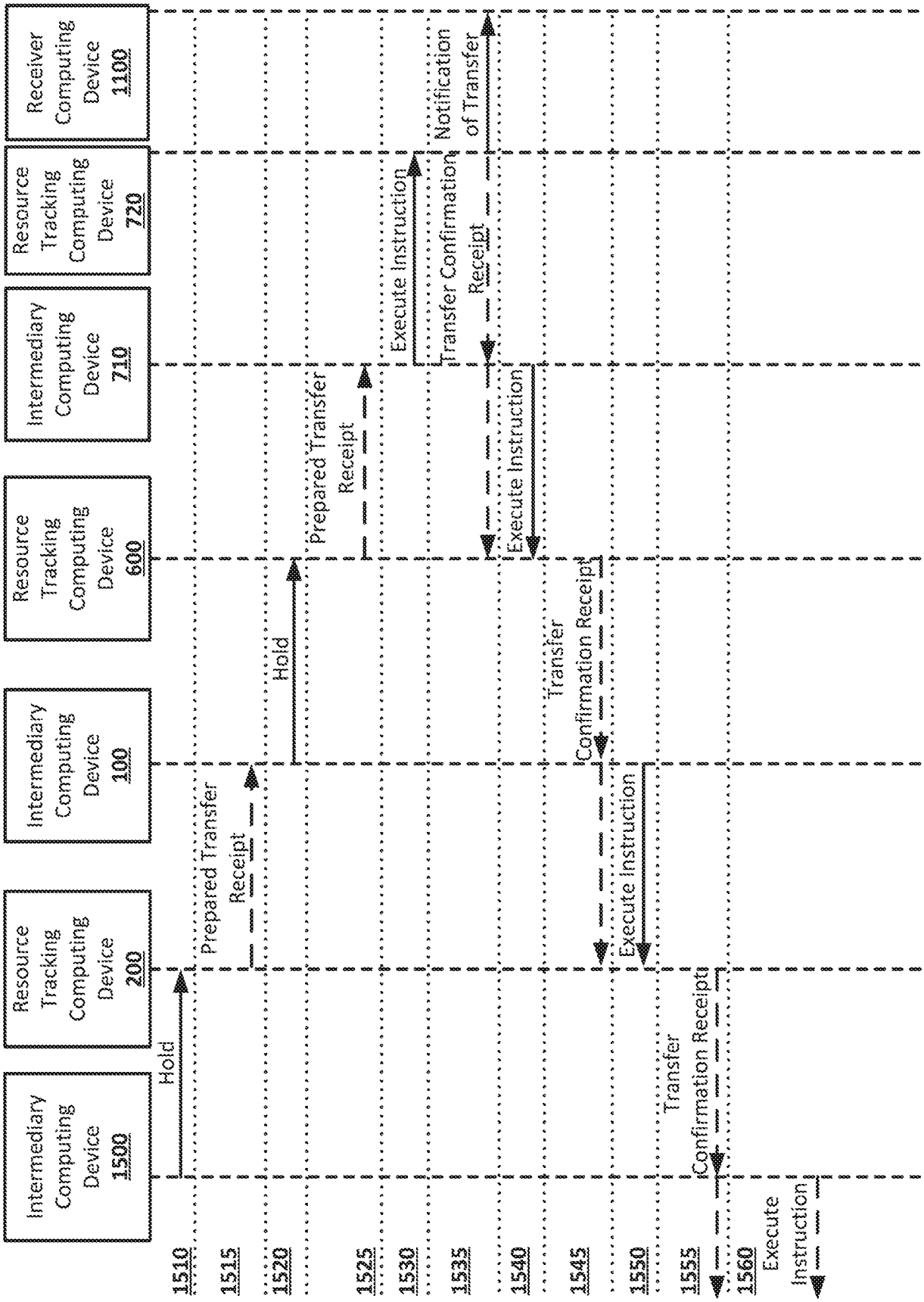

Intermediary Computing Device 1500
Resource Tracking Computing Device 200
Intermediary Computing Device 100
Resource Tracking Computing Device 600
Intermediary Computing Device 710
Resource Tracking Computing Device 720
Receiver Computing Device 1100
1510
Hold
1515
Prepared Transfer
Receipt
1520
Hold
1525
Prepared Transfer
Receipt
1530
Execute Instruction
1535
Transfer Confirmation
Receipt
Notification of Transfer
1540
Execute Instruction
1545
Transfer
Confirmation Receipt
1550
Execute Instruction
1555
Transfer
Confirmation Receipt
1560
Execute Instruction

FIG. 16

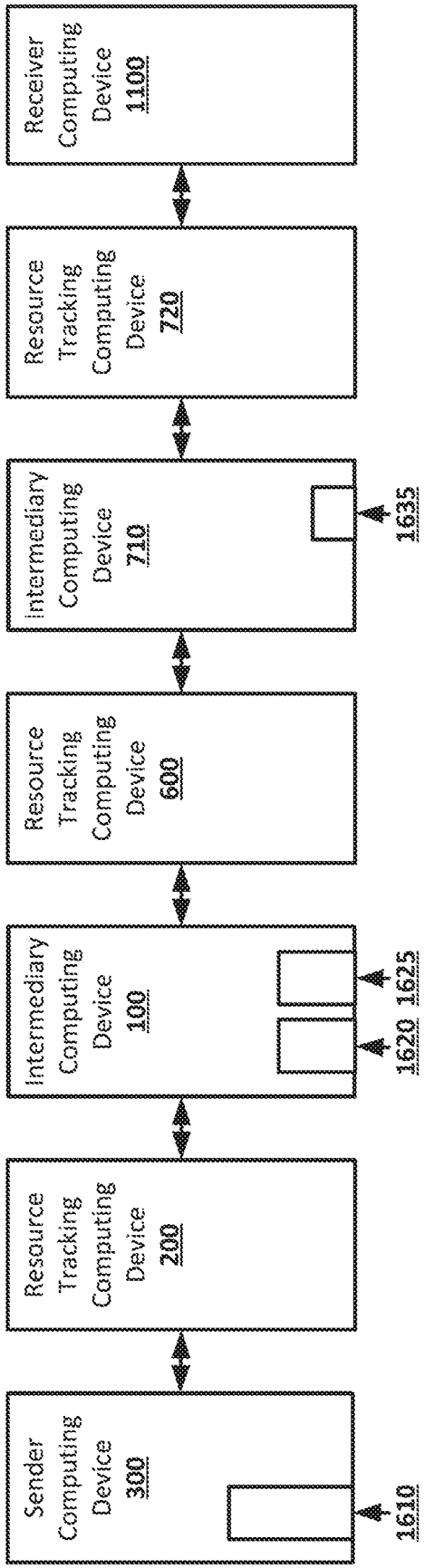
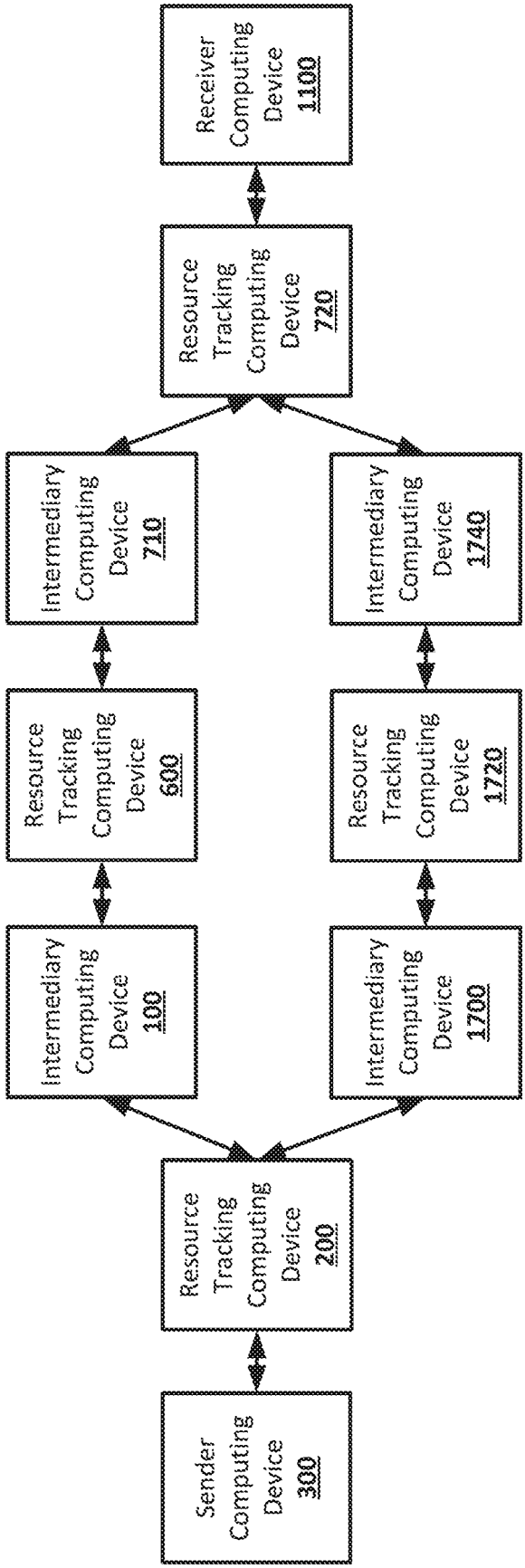


FIG. 17A



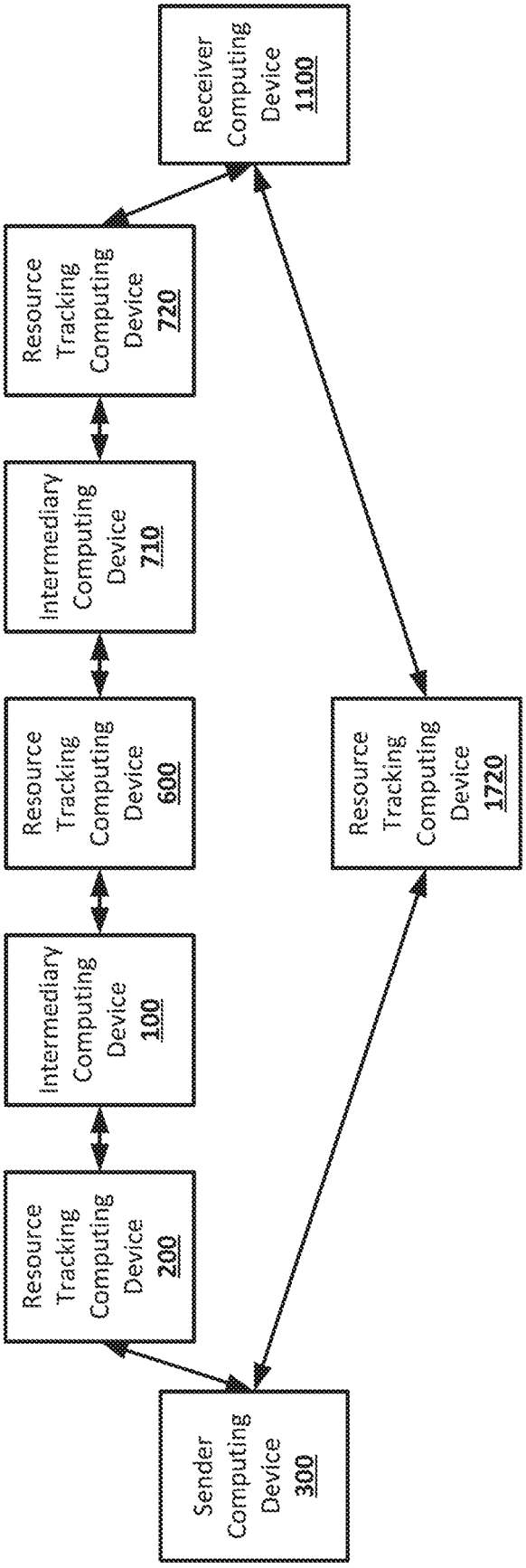

Receiver Computing Device 1100
Resource Tracking Computing Device 720
Intermediary Computing Device 710
Resource Tracking Computing Device 600
Intermediary Computing Device 100
Resource Tracking Computing Device 200
Sender Computing Device 300
Resource Tracking Computing Device 1720

FIG. 17B

FIG. 18A

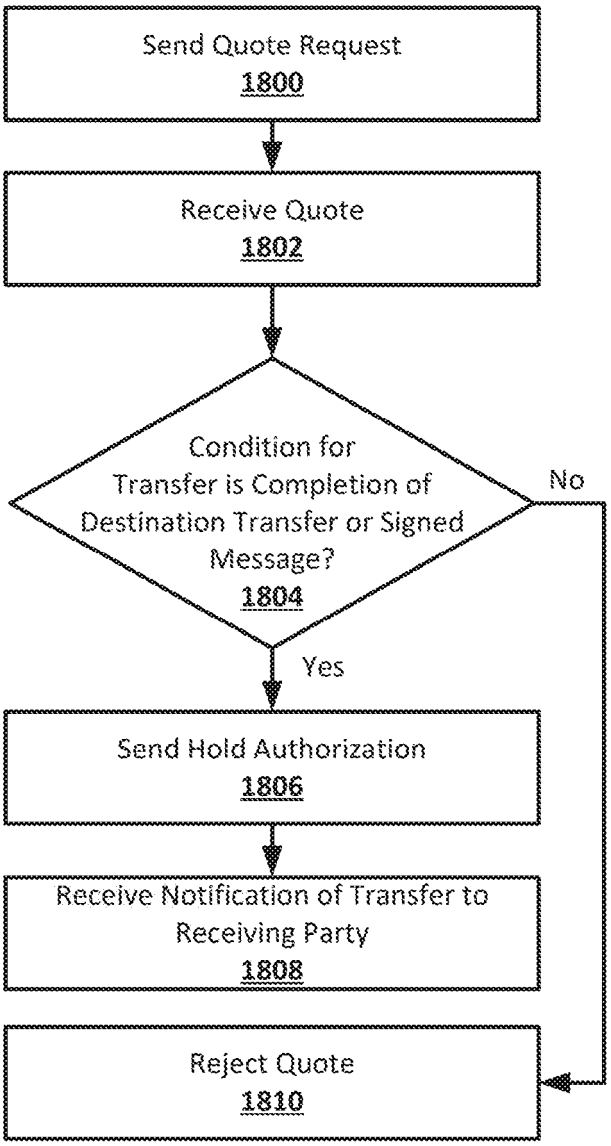


FIG. 18B

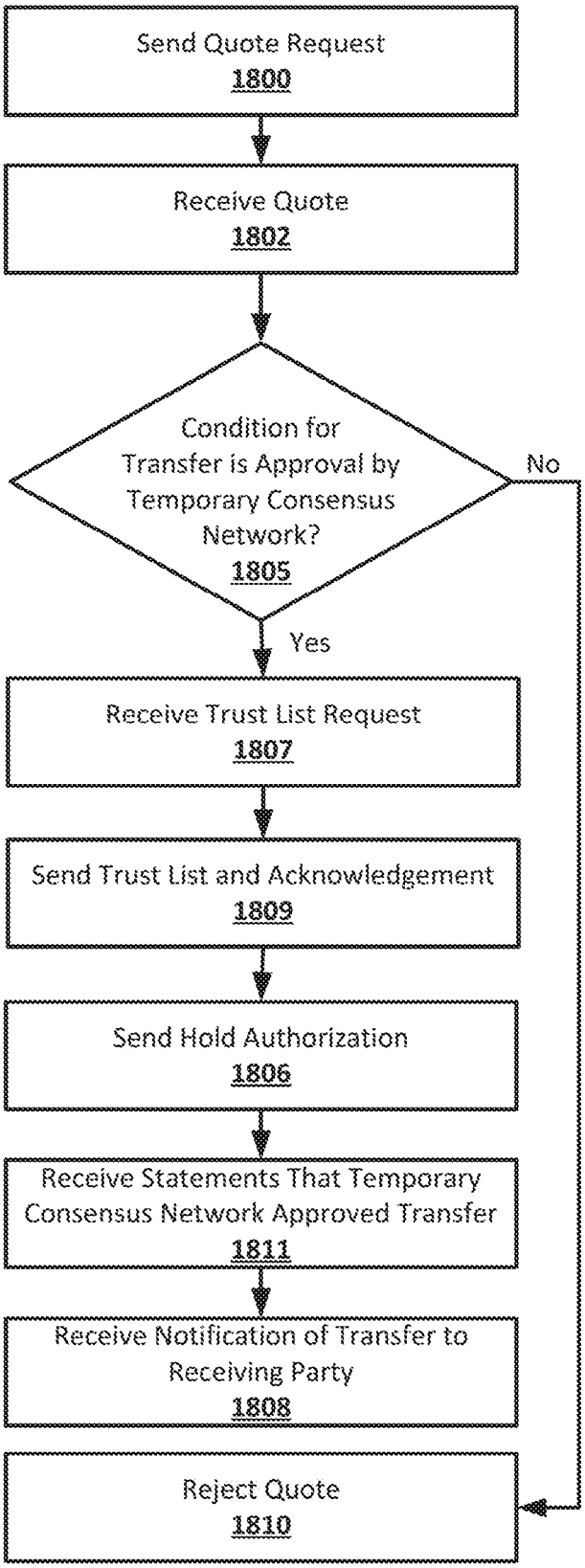


FIG. 19

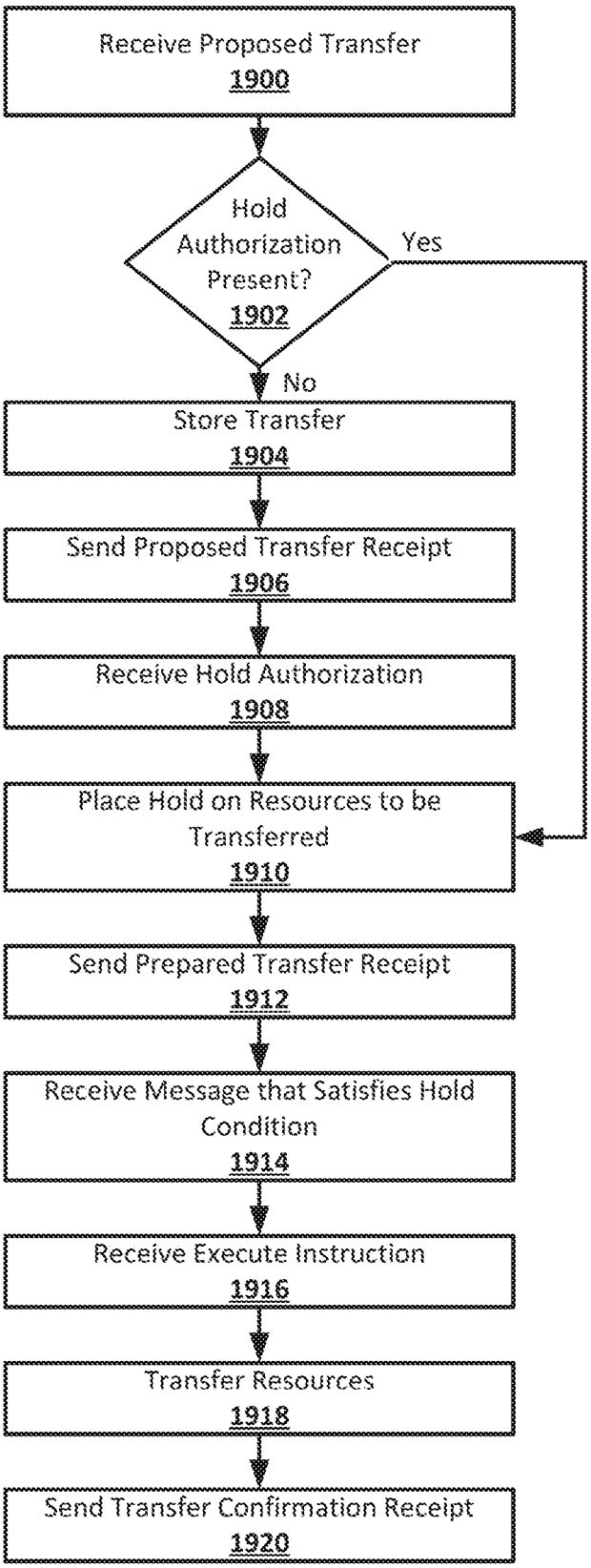

Receive Proposed Transfer
1900
Hold Authorization Present?
1902
Yes
No
Store Transfer
1904
Send Proposed Transfer Receipt
1906
Receive Hold Authorization
1908
Place Hold on Resources to be Transferred
1910
Send Prepared Transfer Receipt
1912
Receive Message that Satisfies Hold Condition
1914
Receive Execute Instruction
1916
Transfer Resources
1918
Send Transfer Confirmation Receipt
1920

FIG. 20A

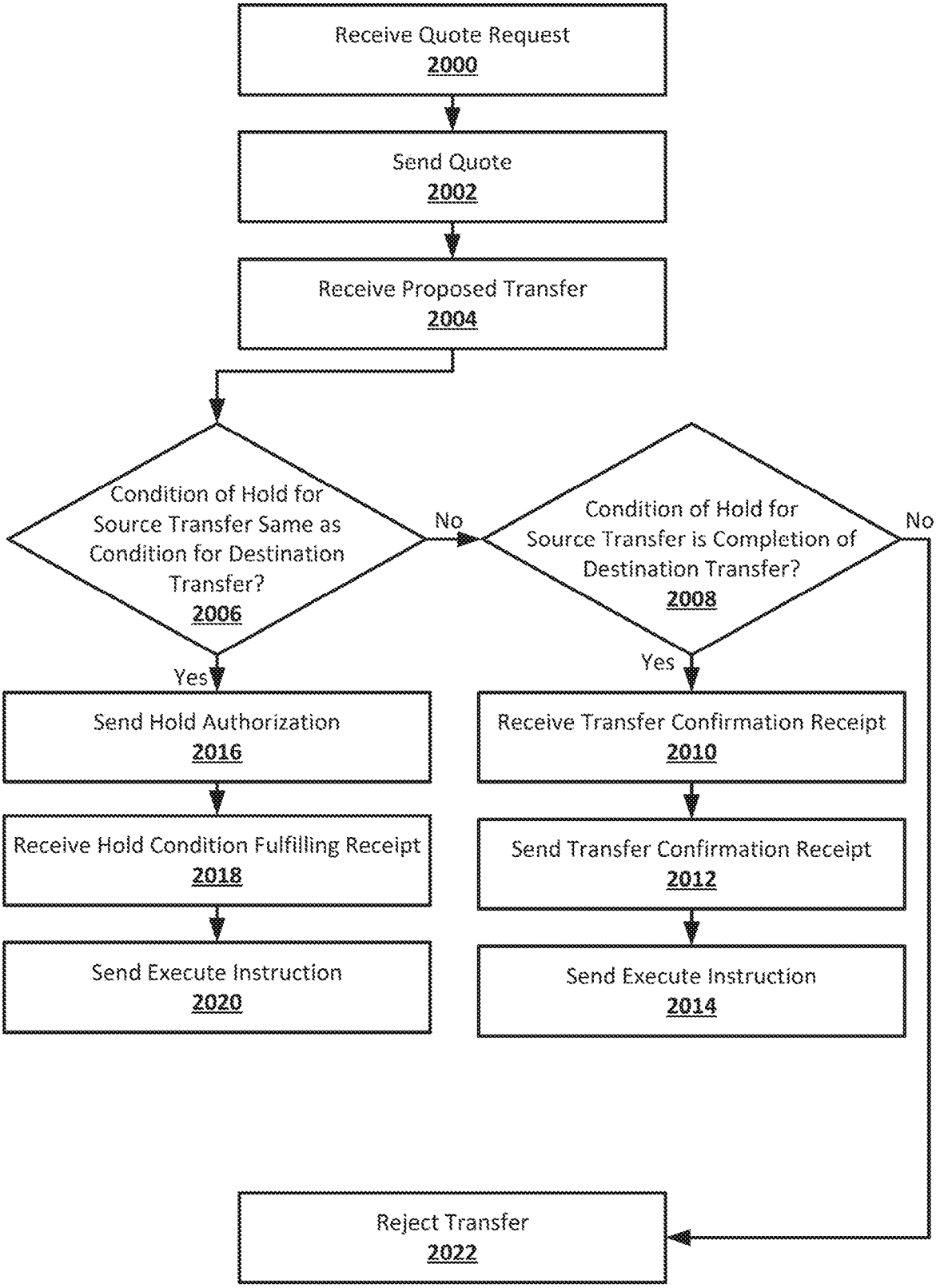

Receive Quote Request
2000
Send Quote
2002
Receive Proposed Transfer
2004
Condition of Hold for Source Transfer Same as Condition for Destination Transfer?
2006
No
Condition of Hold for Source Transfer is Completion of Destination Transfer?
2008
No
Yes
Yes
Send Hold Authorization
2016
Receive Hold Condition Fulfilling Receipt
2018
Send Execute Instruction
2020
Receive Transfer Confirmation Receipt
2010
Send Transfer Confirmation Receipt
2012
Send Execute Instruction
2014
Reject Transfer
2022

FIG. 20B

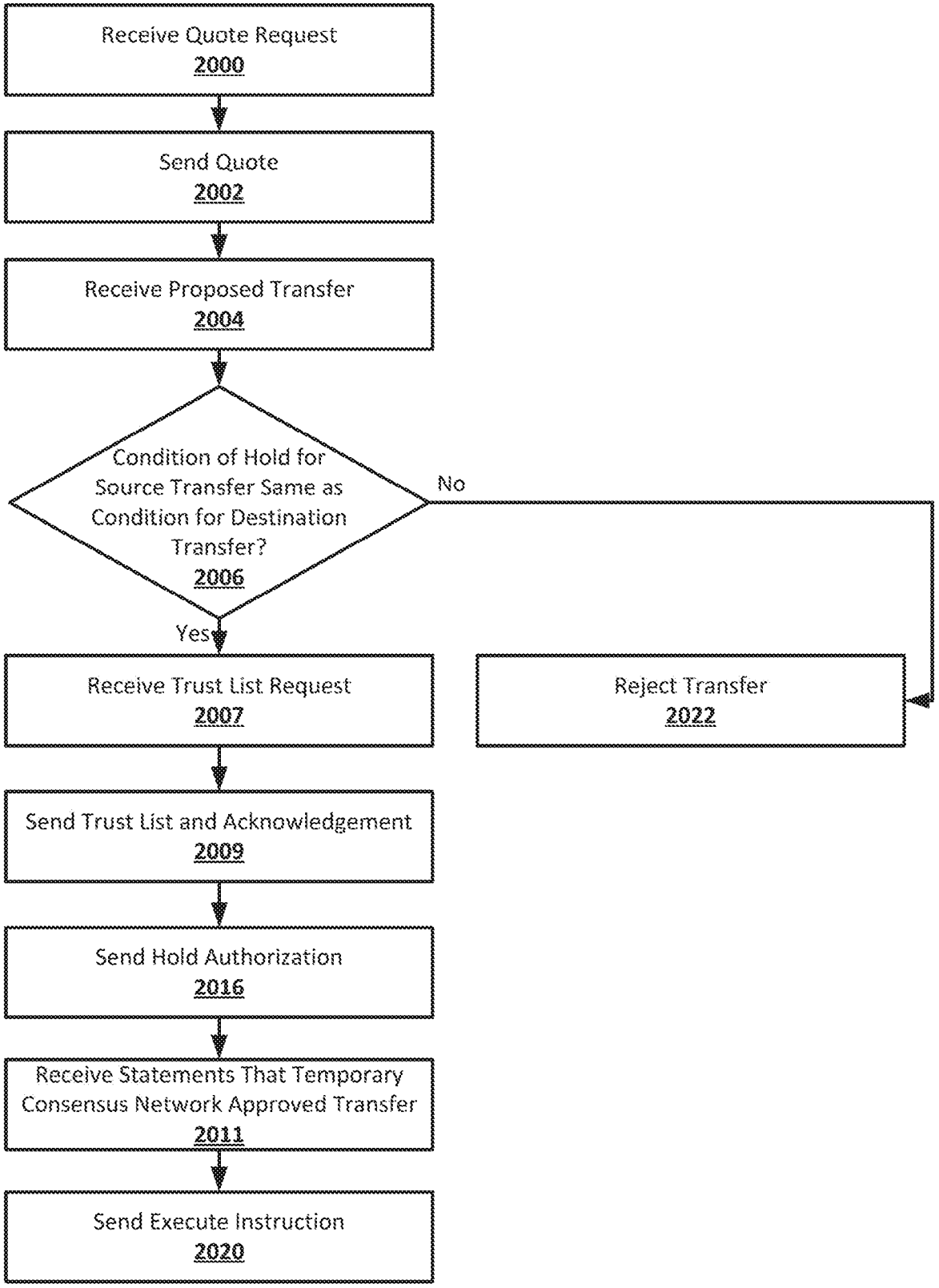

Receive Quote Request
2000
Send Quote
2002
Receive Proposed Transfer
2004
Condition of Hold for Source Transfer Same as Condition for Destination Transfer?
2006
No
Yes
Receive Trust List Request
2007
Reject Transfer
2022
Send Trust List and Acknowledgement
2009
Send Hold Authorization
2016
Receive Statements That Temporary Consensus Network Approved Transfer
2011
Send Execute Instruction
2020

FIG. 21

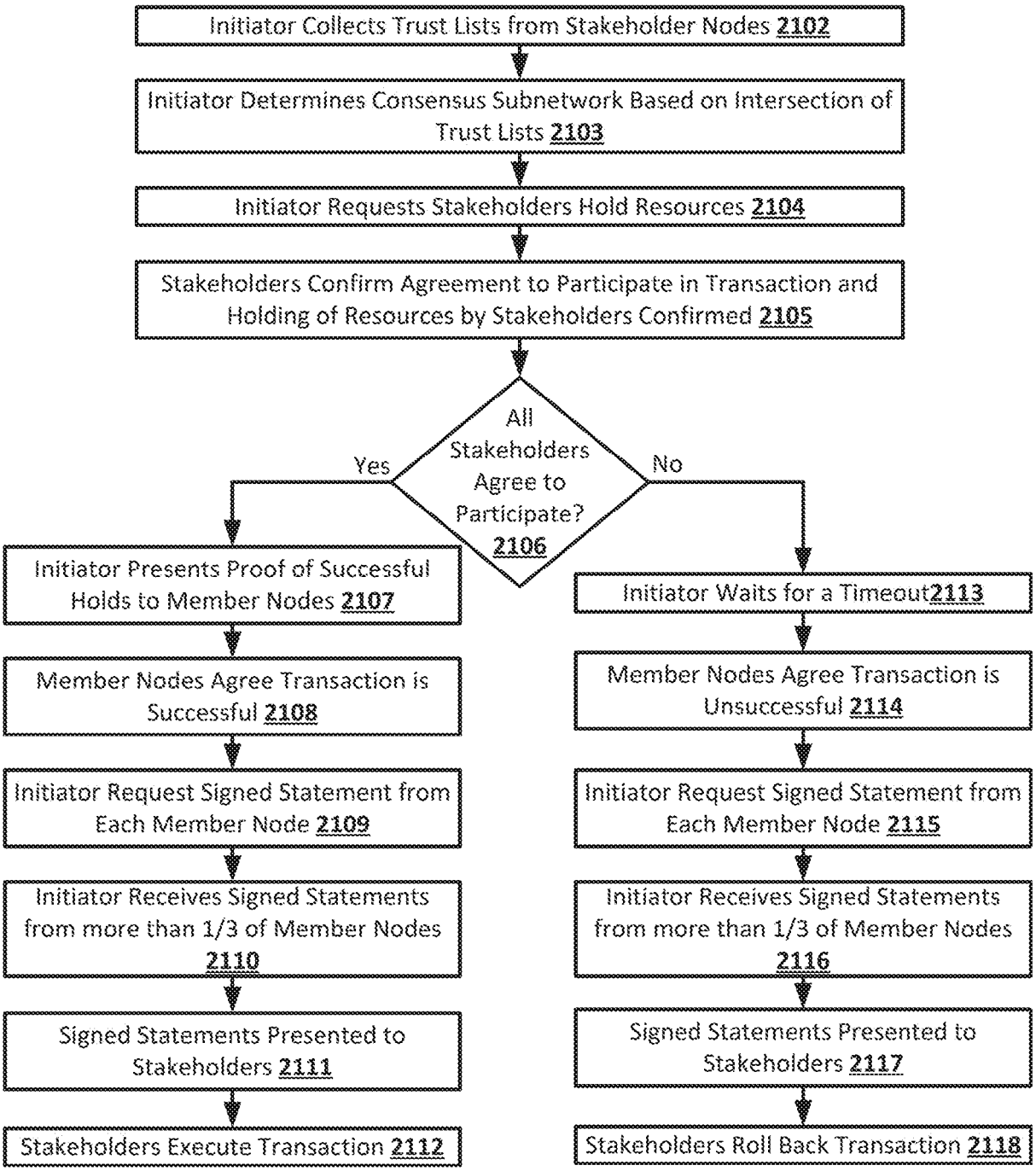

Initiator Collects Trust Lists from Stakeholder Nodes 2102
Initiator Determines Consensus Subnetwork Based on Intersection of Trust Lists 2103
Initiator Requests Stakeholders Hold Resources 2104
Stakeholders Confirm Agreement to Participate in Transaction and Holding of Resources by Stakeholders Confirmed 2105
All Stakeholders Agree to Participate? 2106
Yes
No
Initiator Presents Proof of Successful Holds to Member Nodes 2107
Member Nodes Agree Transaction is Successful 2108
Initiator Request Signed Statement from Each Member Node 2109
Initiator Receives Signed Statements from more than 1/3 of Member Nodes 2110
Signed Statements Presented to Stakeholders 2111
Stakeholders Execute Transaction 2112
Initiator Waits for a Timeout2113
Member Nodes Agree Transaction is Unsuccessful 2114
Initiator Request Signed Statement from Each Member Node 2115
Initiator Receives Signed Statements from more than 1/3 of Member Nodes 2116
Signed Statements Presented to Stakeholders 2117
Stakeholders Roll Back Transaction 2118

FIG. 22

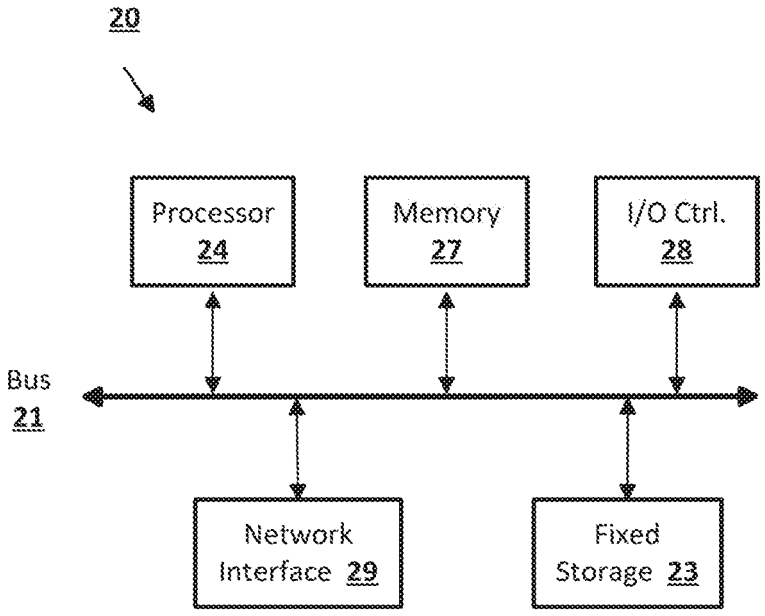
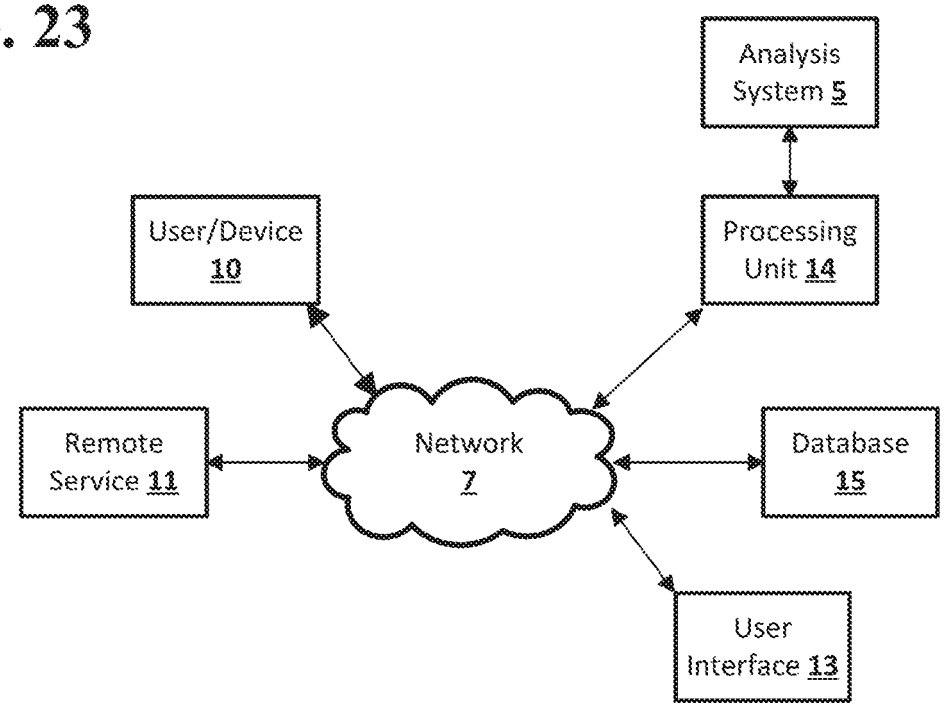

20
Processor 24
Memory 27
I/O Ctrl. 28
Bus 21
Network Interface 29
Fixed Storage 23

FIG. 23


Analysis System 5
User/Device 10
Processing Unit 14
Remote Service 11
Network 7
Database 15
User Interface 13