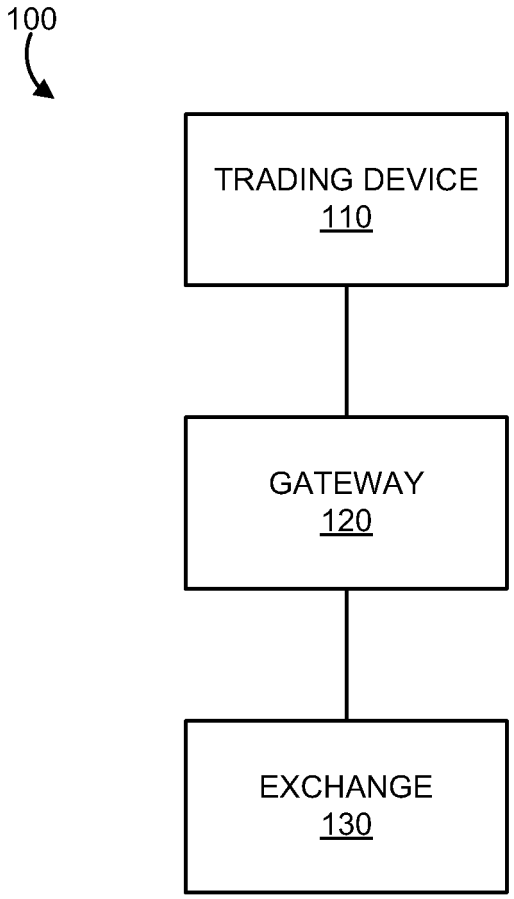


FIGURE 1

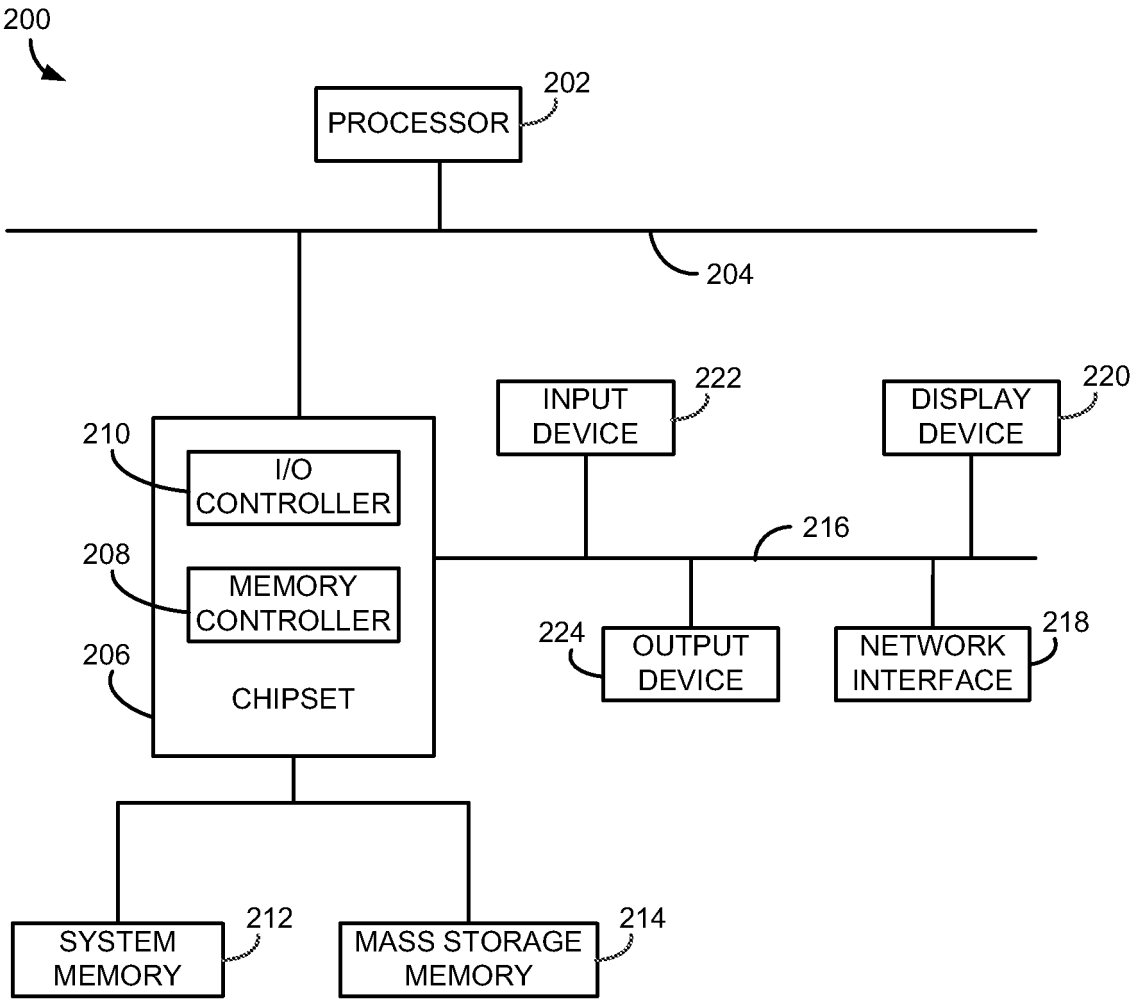

200
PROCESSOR
202
204
INPUT DEVICE
222
DISPLAY DEVICE
220
210
I/O CONTROLLER
208
MEMORY CONTROLLER
206
CHIPSET
216
224
OUTPUT DEVICE
NETWORK INTERFACE
218
SYSTEM MEMORY
212
MASS STORAGE MEMORY
214

FIGURE 2

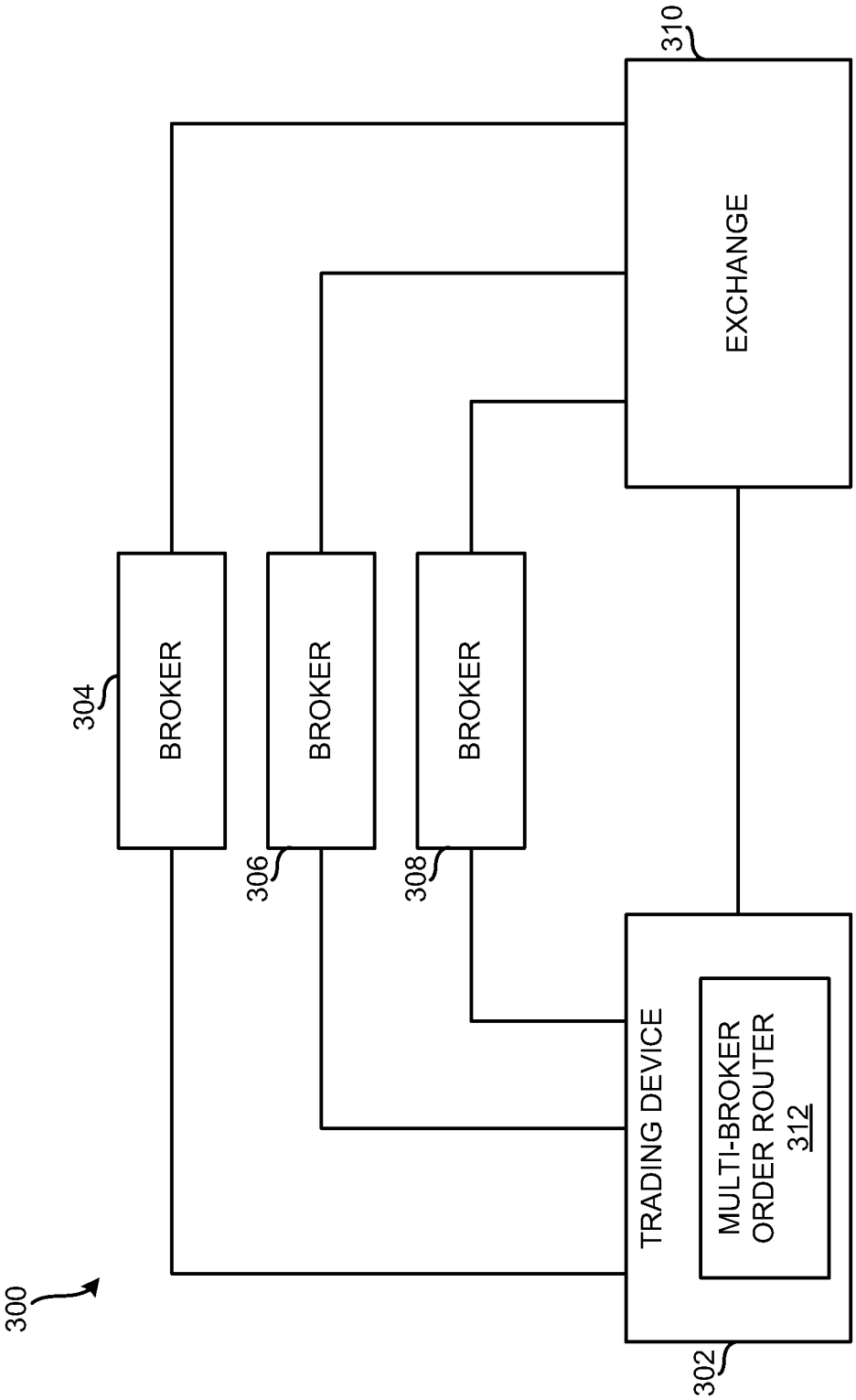

300
302
TRADING DEVICE
MULTI-BROKER ORDER ROUTER 312
304
BROKER
306
BROKER
308
BROKER
310
EXCHANGE

FIGURE 3

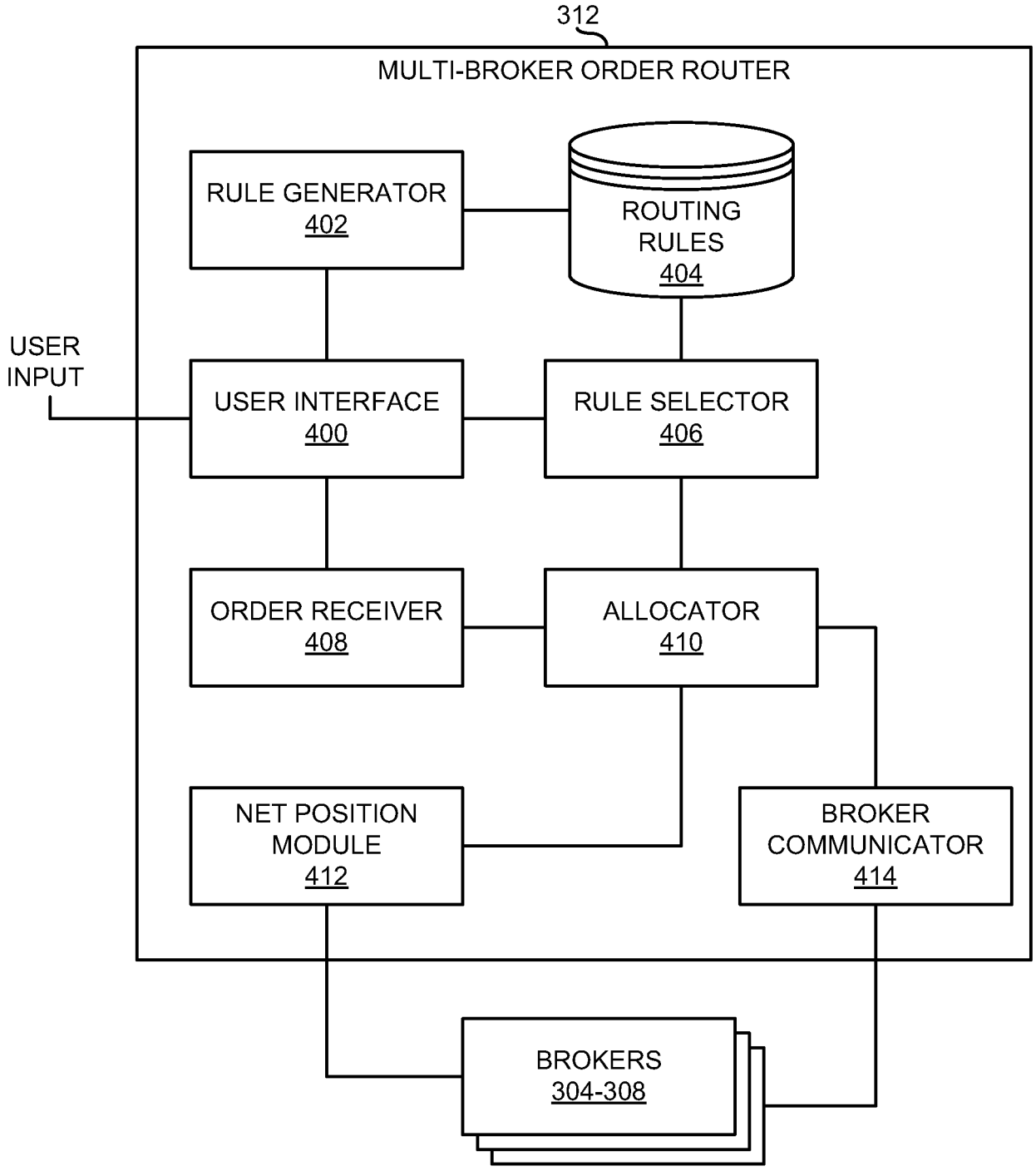

312
MULTI-BROKER ORDER ROUTER
RULE GENERATOR
402
ROUTING
RULES
404
USER
INPUT
USER INTERFACE
400
RULE SELECTOR
406
ORDER RECEIVER
408
ALLOCATOR
410
NET POSITION
MODULE
412
BROKER
COMMUNICATOR
414
BROKERS
304-308

FIGURE 4

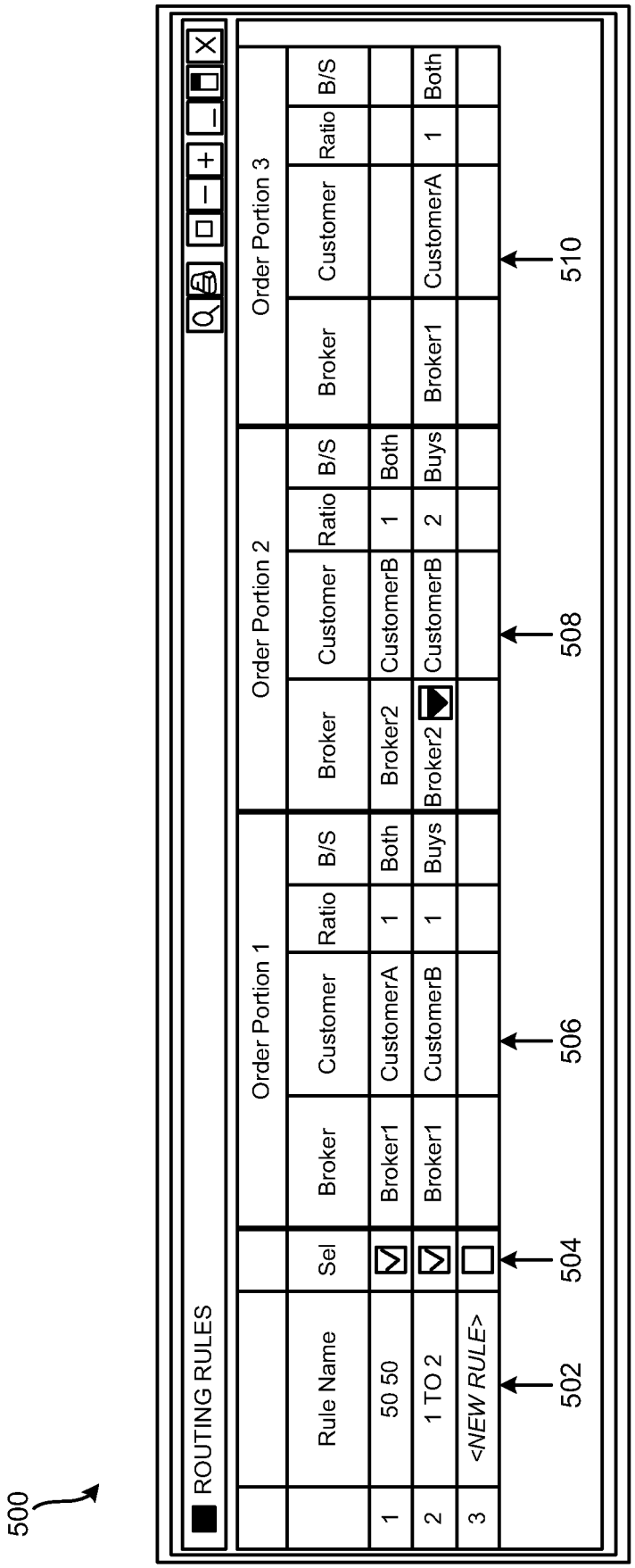

500
ROUTING RULES
Order Portion 1
Order Portion 2
Order Portion 3
Rule Name
Sel
Broker
Customer
Ratio
B/S
1
50 50
Broker1
CustomerA
1
Both
Broker2
CustomerB
1
Both
Broker
Customer
Ratio
B/S
2
1 TO 2
Broker1
CustomerB
1
Buys
Broker2
CustomerB
2
Buys
Broker
Customer
Ratio
B/S
3
<NEW RULE>
Broker1
CustomerA
1
Both
502
504
506
508
510

FIGURE 5

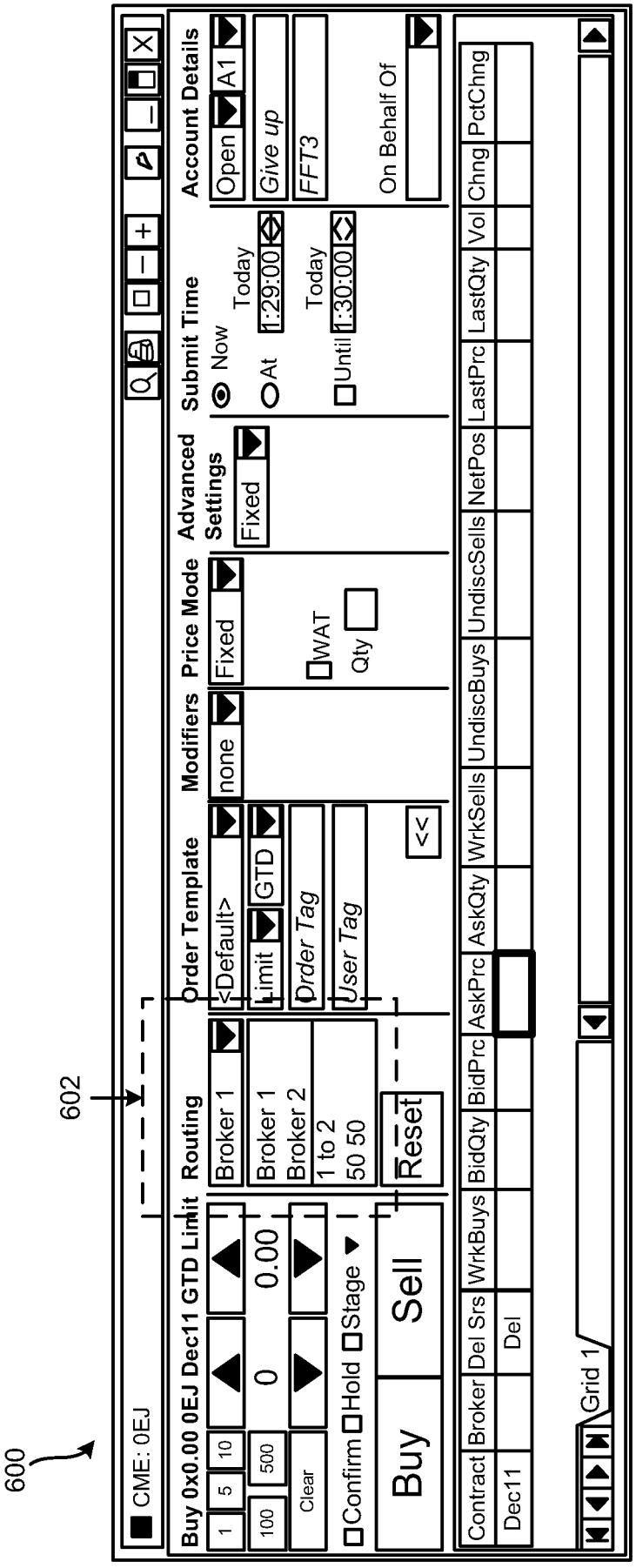

600
602
CME: 0EJ
Buy 0x0.00 0EJ Dec11 GTD Limit
Routing
Order Template
Modifiers
Price Mode
Advanced Settings
Submit Time
Account Details
Broker 1
Broker 1
Broker 2
1 to 2
50 50
<Default>
Limit
GTD
Order Tag
User Tag
none
Fixed
Fixed
WAT
Qty
Now
At
Today
1:29:00
Today
Until
1:30:00
Open
A1
Give up
FFT3
On Behalf Of
1
5
10
100
500
Clear
0
0.00
Confirm
Hold
Stage
Buy
Sell
Reset
<<
Contract
Broker
Del Srs
WrkBuys
BidQty
BidPrc
AskPrc
AskQty
WrkSells
UndiscBuys
UndiscSells
NetPos
LastPrc
LastQty
Vol
Chng
PctChng
Dec11
Del
Grid 1

FIGURE 6

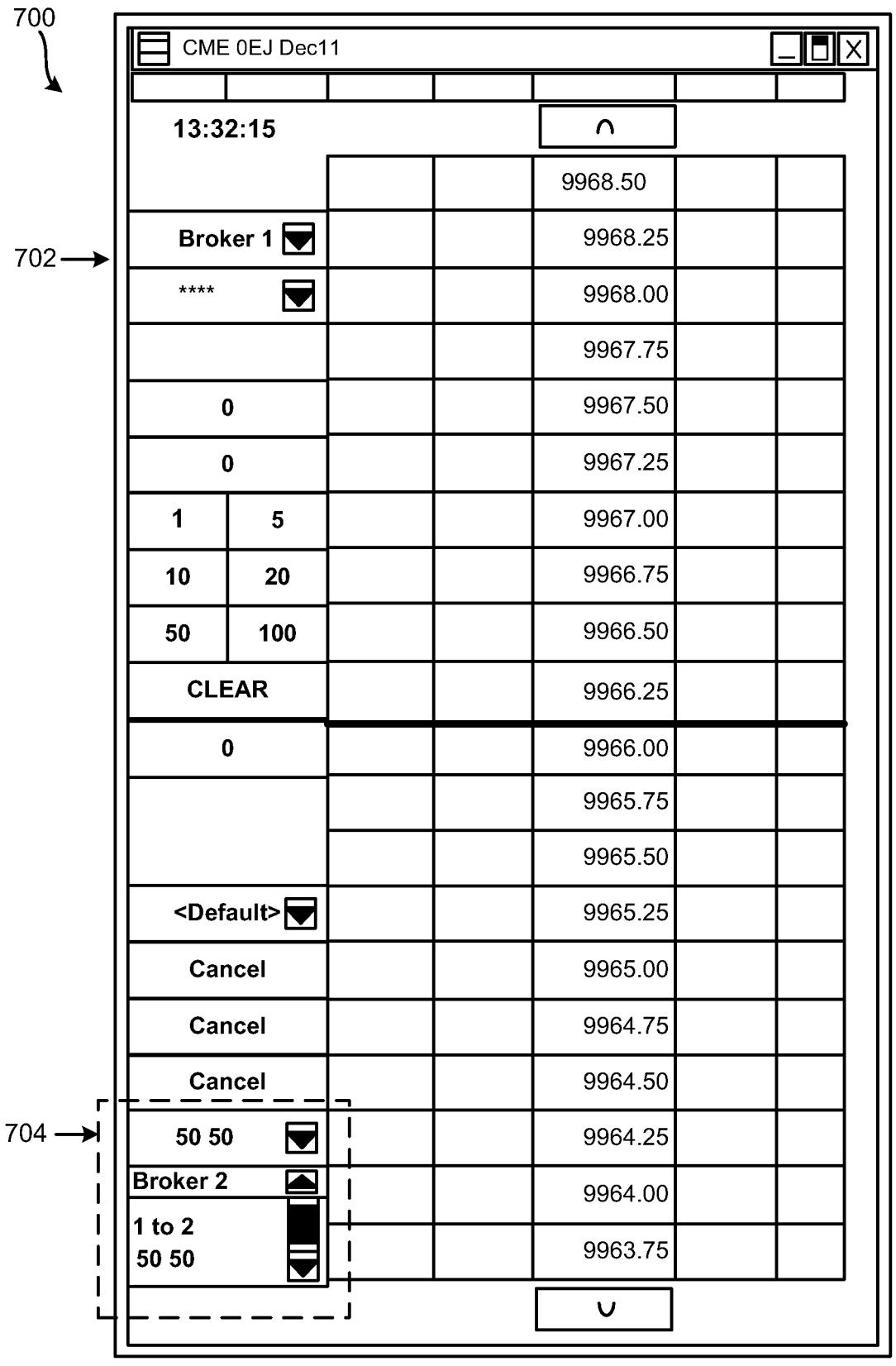

700
CME 0EJ Dec11
13:32:15
9968.50
Broker 1
9968.25
****
9968.00
9967.75
0
9967.50
0
9967.25
1
5
9967.00
10
20
9966.75
50
100
9966.50
CLEAR
9966.25
0
9966.00
9965.75
9965.50
<Default>
9965.25
Cancel
9965.00
Cancel
9964.75
Cancel
9964.50
50 50
9964.25
Broker 2
9964.00
1 to 2
50 50
9963.75
702
704

FIGURE 7

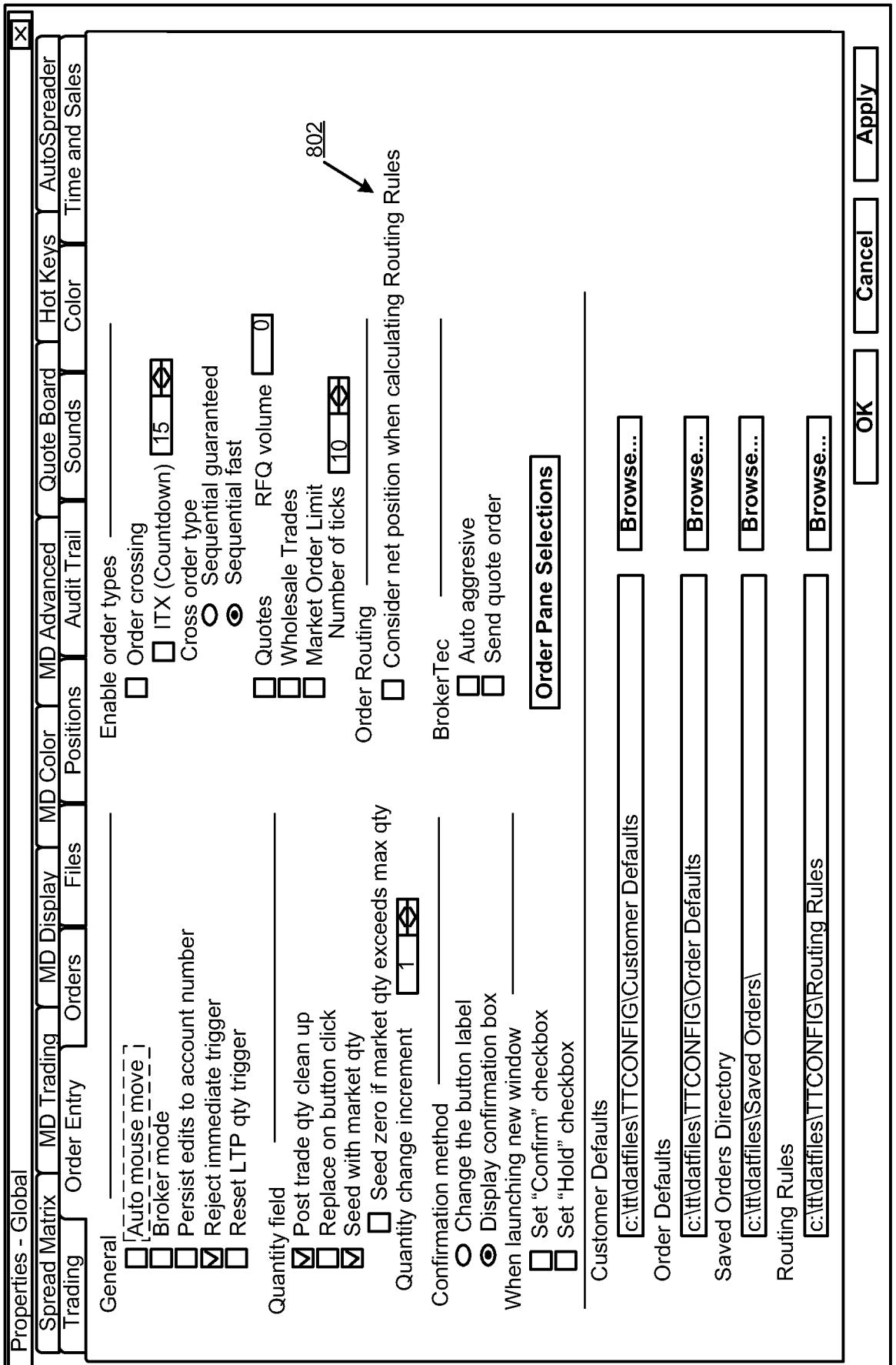

Properties - Global
Spread Matrix
MD Trading
MD Display
MD Color
MD Advanced
Quote Board
Hot Keys
AutoSpreader
Trading
Order Entry
Orders
Files
Positions
Audit Trail
Sounds
Color
Time and Sales
General
Auto mouse move
Broker mode
Persist edits to account number
Reject immediate trigger
Reset LTP qty trigger
Quantity field
Post trade qty clean up
Replace on button click
Seed with market qty
Seed zero if market qty exceeds max qty
Quantity change increment
1
Confirmation method
Change the button label
Display confirmation box
When launching new window
Set "Confirm" checkbox
Set "Hold" checkbox
Enable order types
Order crossing
ITX (Countdown)
15
Cross order type
Sequential guaranteed
Sequential fast
Quotes
RFQ volume
0
Wholesale Trades
Market Order Limit
Number of ticks
10
802
Order Routing
Consider net position when calculating Routing Rules
BrokerTec
Auto aggresive
Send quote order
Order Pane Selections
Customer Defaults
c:\tt\datfiles\TTCONFIG\Customer Defaults
Browse...
Order Defaults
c:\tt\datfiles\TTCONFIG\Order Defaults
Browse...
Saved Orders Directory
c:\tt\datfiles\Saved Orders\
Browse...
Routing Rules
c:\tt\datfiles\TTCONFIG\Routing Rules
Browse...
OK
Cancel
Apply
800

FIGURE 8

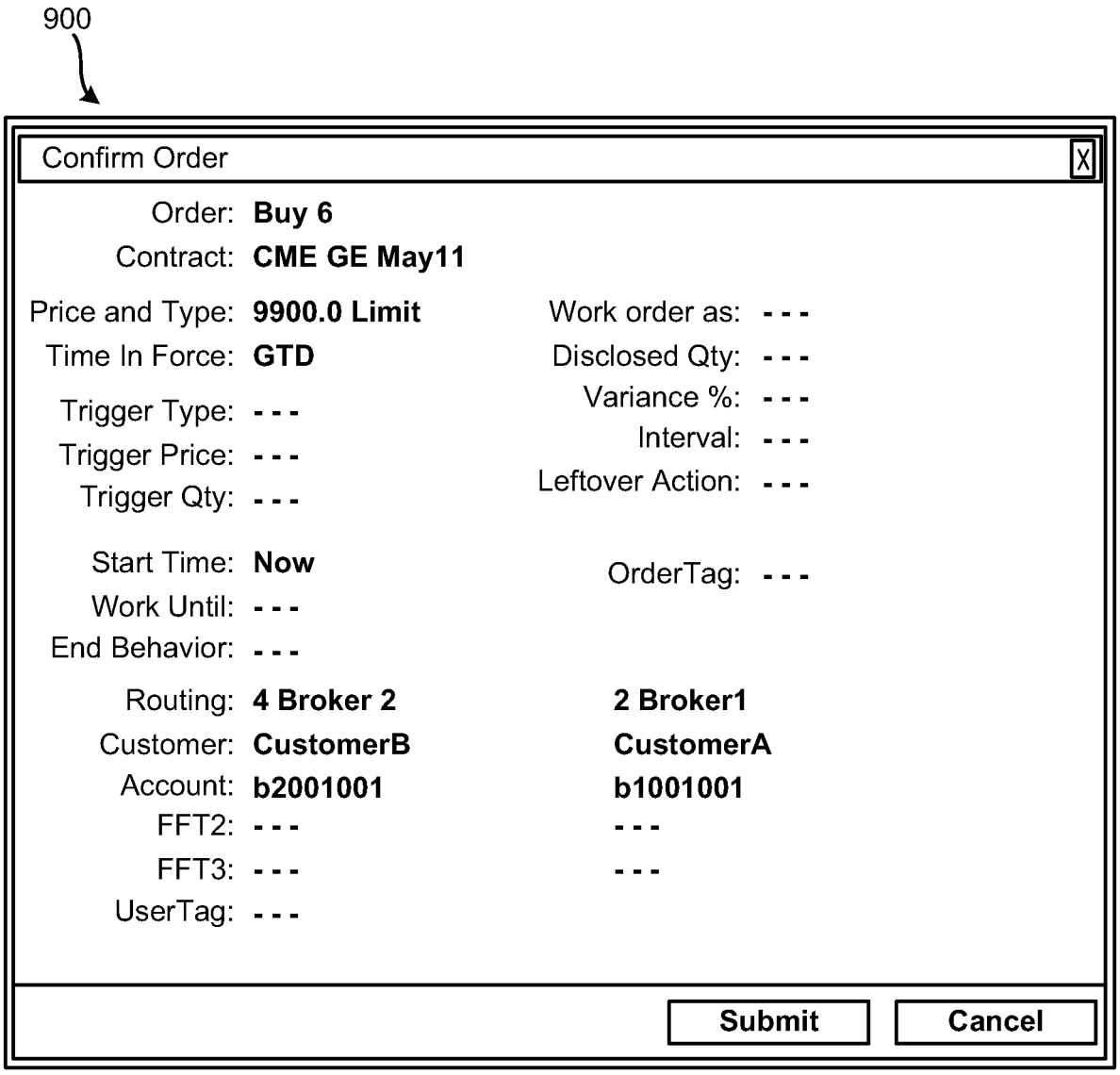

900
Confirm Order
X
Order: Buy 6
Contract: CME GE May11
Price and Type: 9900.0 Limit
Time In Force: GTD
Trigger Type: - - -
Trigger Price: - - -
Trigger Qty: - - -
Start Time: Now
Work Until: - - -
End Behavior: - - -
Work order as: - - -
Disclosed Qty: - - -
Variance %: - - -
Interval: - - -
Leftover Action: - - -
OrderTag: - - -
Routing: 4 Broker 2
Customer: CustomerB
Account: b2001001
FFT2: - - -
FFT3: - - -
UserTag: - - -
2 Broker1
CustomerA
b1001001
- - -
- - -
Submit
Cancel

FIGURE 9

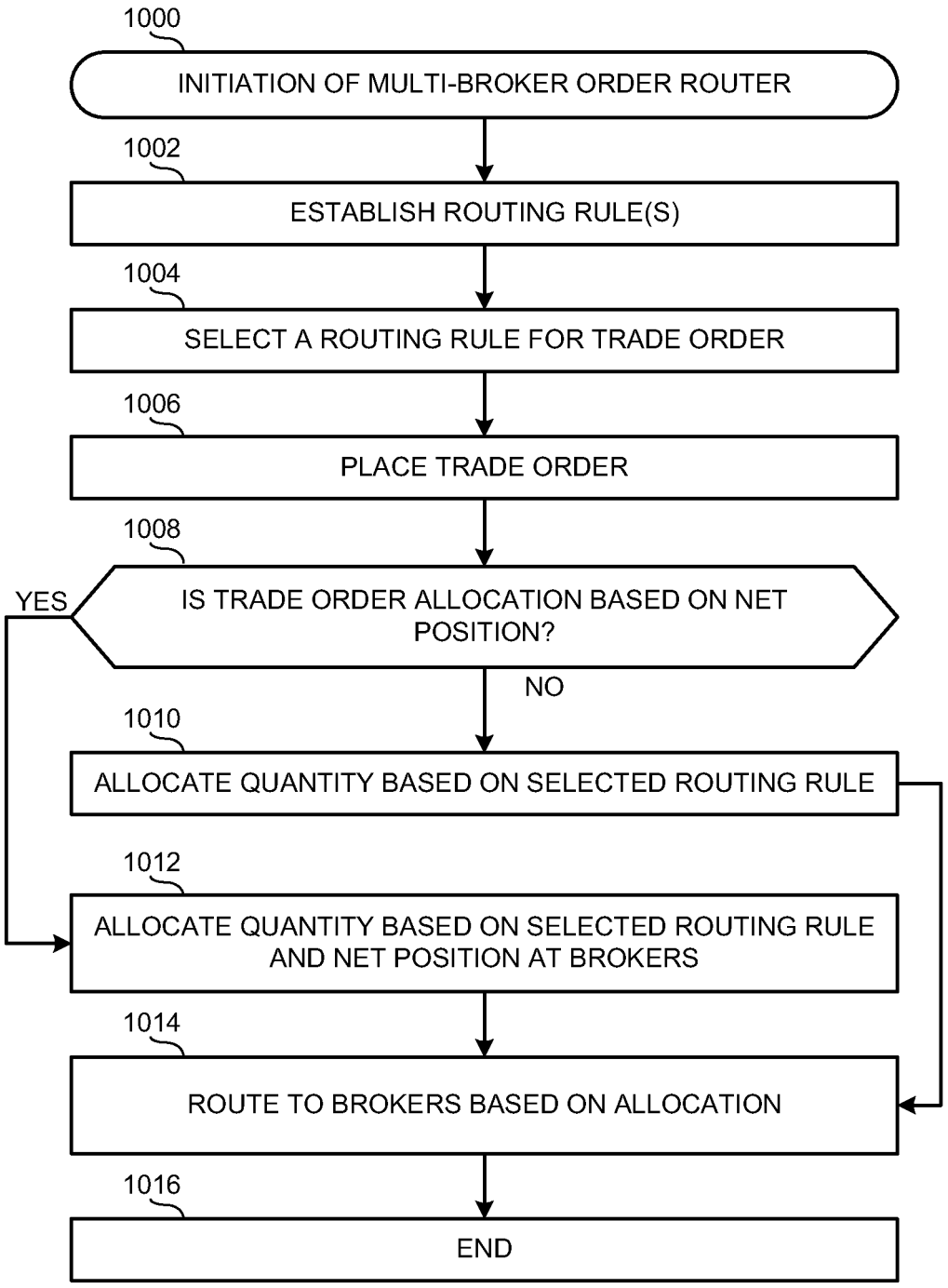

1000
INITIATION OF MULTI-BROKER ORDER ROUTER
1002
ESTABLISH ROUTING RULE(S)
1004
SELECT A ROUTING RULE FOR TRADE ORDER
1006
PLACE TRADE ORDER
1008
YES
IS TRADE ORDER ALLOCATION BASED ON NET POSITION?
NO
1010
ALLOCATE QUANTITY BASED ON SELECTED ROUTING RULE
1012
ALLOCATE QUANTITY BASED ON SELECTED ROUTING RULE AND NET POSITION AT BROKERS
1014
ROUTE TO BROKERS BASED ON ALLOCATION
1016
END

FIGURE 10

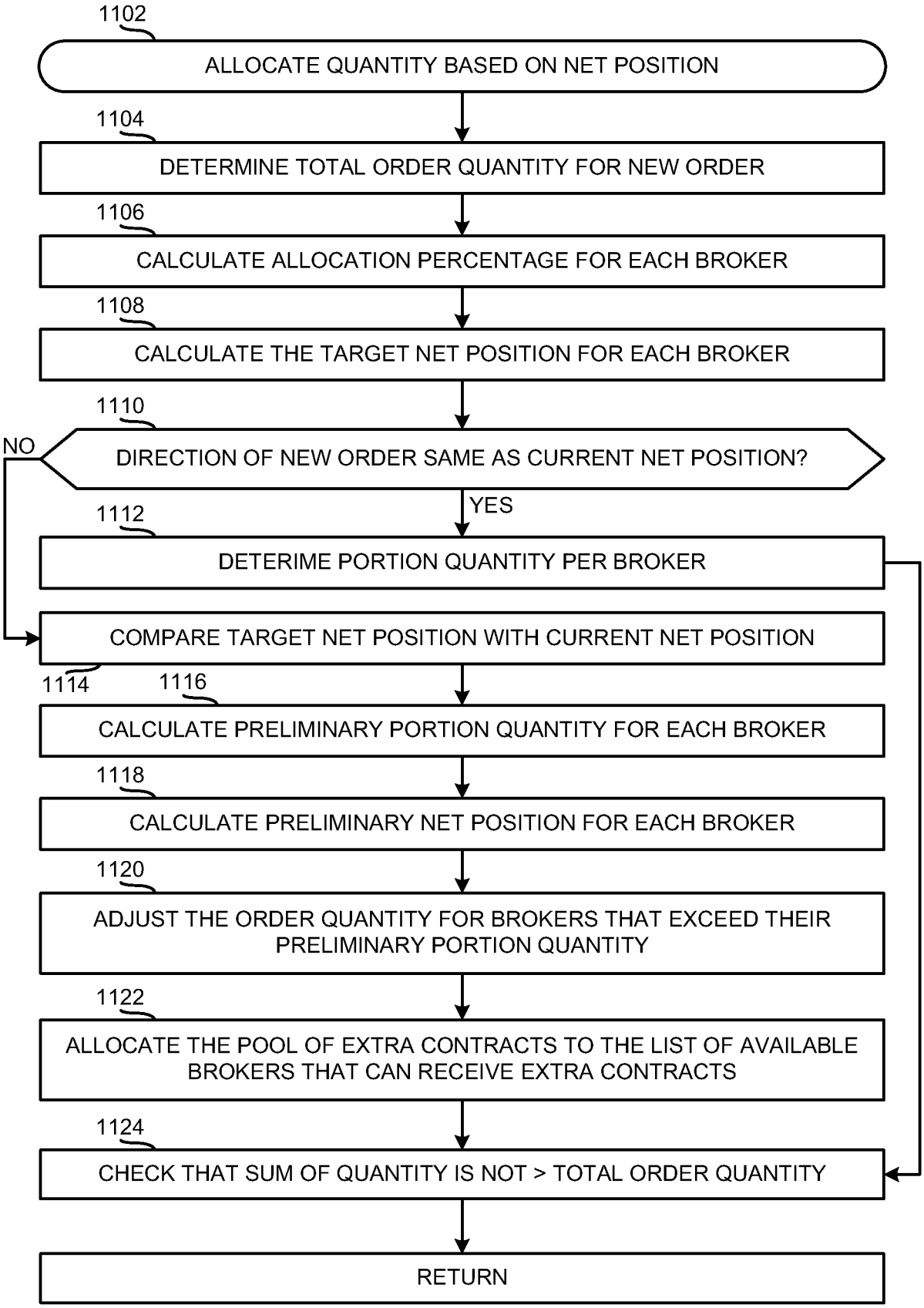

1102
ALLOCATE QUANTITY BASED ON NET POSITION
1104
DETERMINE TOTAL ORDER QUANTITY FOR NEW ORDER
1106
CALCULATE ALLOCATION PERCENTAGE FOR EACH BROKER
1108
CALCULATE THE TARGET NET POSITION FOR EACH BROKER
1110
NO
DIRECTION OF NEW ORDER SAME AS CURRENT NET POSITION?
YES
1112
DETERIME PORTION QUANTITY PER BROKER
COMPARE TARGET NET POSITION WITH CURRENT NET POSITION
1114
1116
CALCULATE PRELIMINARY PORTION QUANTITY FOR EACH BROKER
1118
CALCULATE PRELIMINARY NET POSITION FOR EACH BROKER
1120
ADJUST THE ORDER QUANTITY FOR BROKERS THAT EXCEED THEIR PRELIMINARY PORTION QUANTITY
1122
ALLOCATE THE POOL OF EXTRA CONTRACTS TO THE LIST OF AVAILABLE BROKERS THAT CAN RECEIVE EXTRA CONTRACTS
1124
CHECK THAT SUM OF QUANTITY IS NOT > TOTAL ORDER QUANTITY
RETURN

FIGURE 11

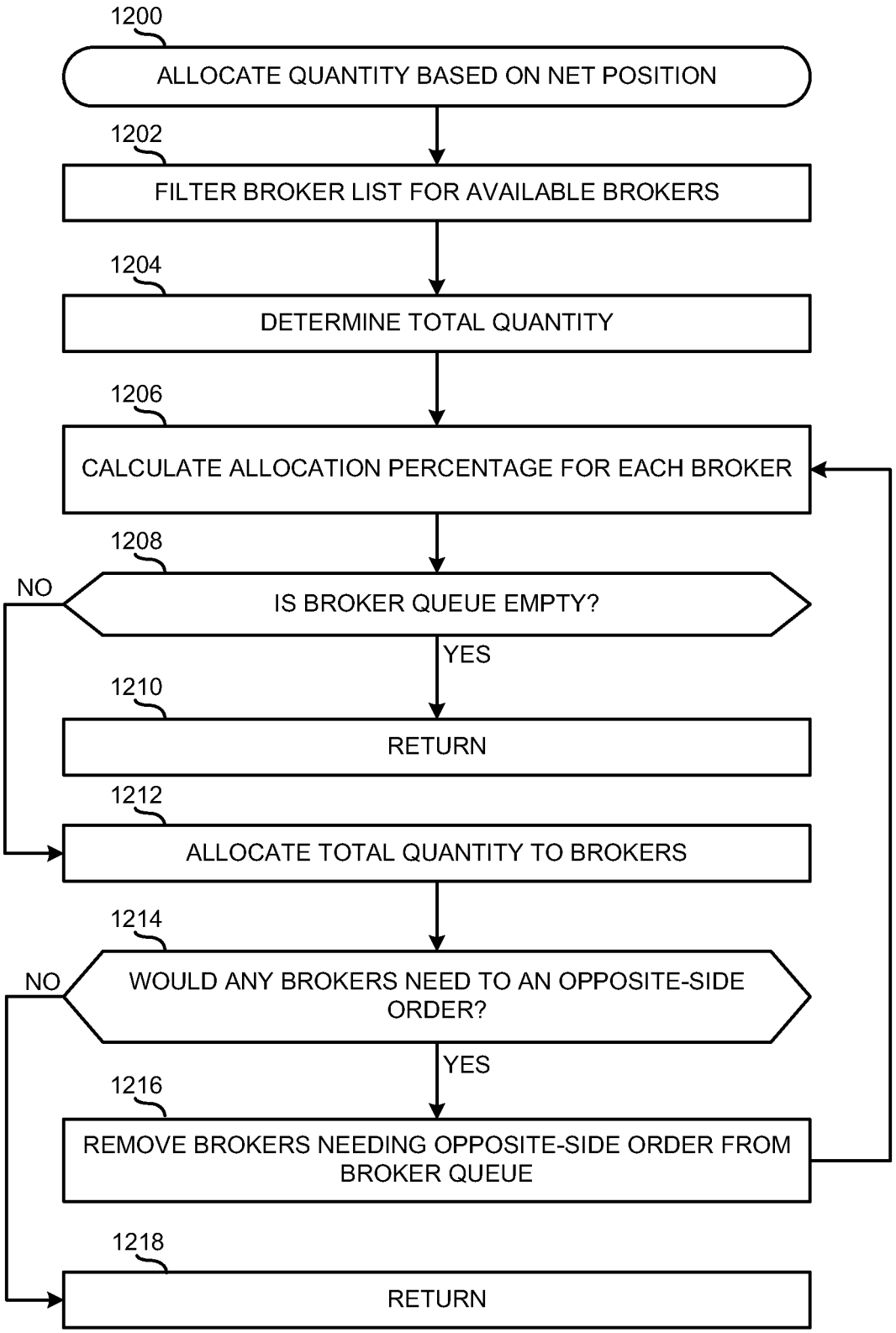

1200
ALLOCATE QUANTITY BASED ON NET POSITION
1202
FILTER BROKER LIST FOR AVAILABLE BROKERS
1204
DETERMINE TOTAL QUANTITY
1206
CALCULATE ALLOCATION PERCENTAGE FOR EACH BROKER
1208
NO
IS BROKER QUEUE EMPTY?
YES
1210
RETURN
1212
ALLOCATE TOTAL QUANTITY TO BROKERS
1214
NO
WOULD ANY BROKERS NEED TO AN OPPOSITE-SIDE ORDER?
YES
1216
REMOVE BROKERS NEEDING OPPOSITE-SIDE ORDER FROM BROKER QUEUE
1218
RETURN

FIGURE 12

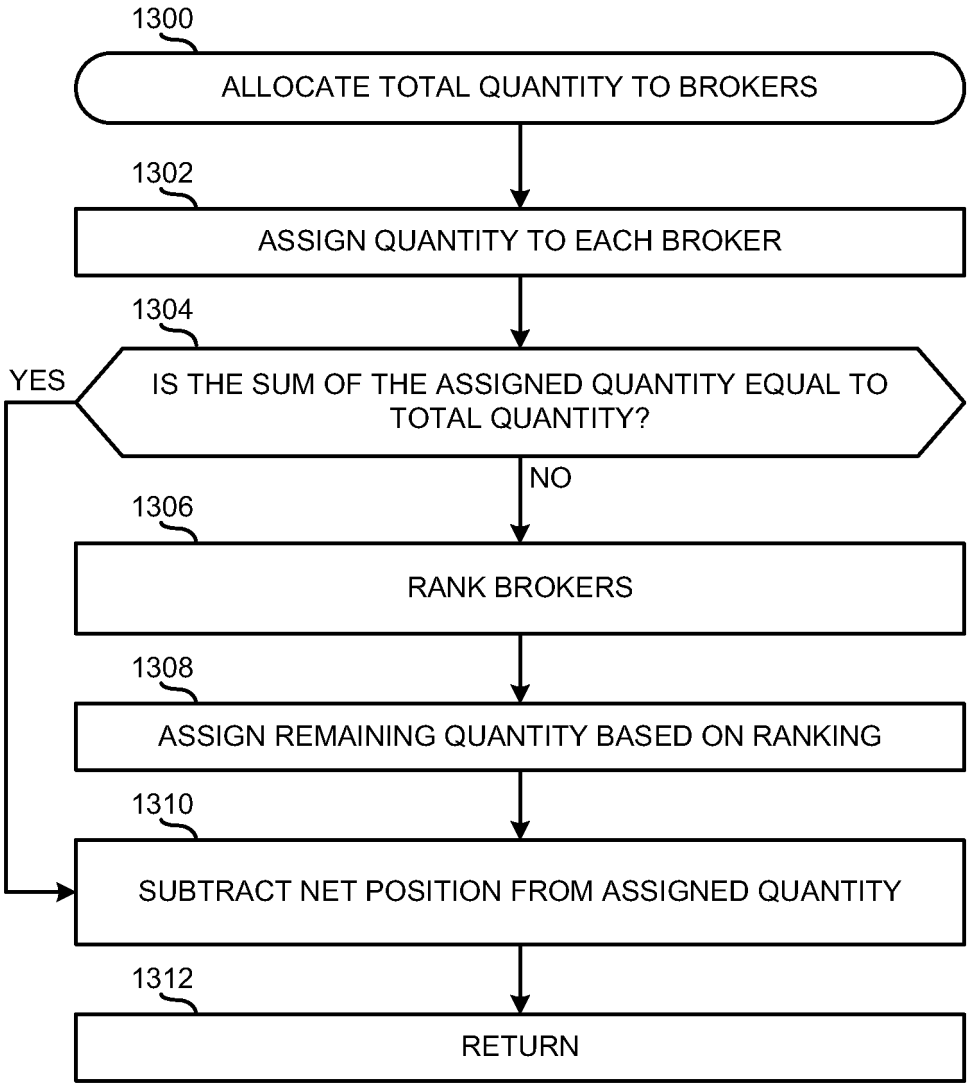

1300
ALLOCATE TOTAL QUANTITY TO BROKERS
1302
ASSIGN QUANTITY TO EACH BROKER
1304
YES
IS THE SUM OF THE ASSIGNED QUANTITY EQUAL TO TOTAL QUANTITY?
NO
1306
RANK BROKERS
1308
ASSIGN REMAINING QUANTITY BASED ON RANKING
1310
SUBTRACT NET POSITION FROM ASSIGNED QUANTITY
1312
RETURN

FIGURE 13