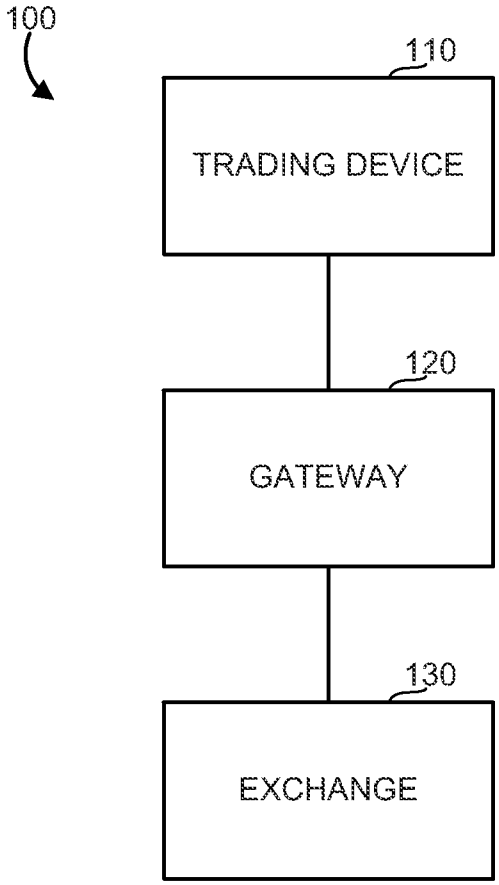


FIGURE 1

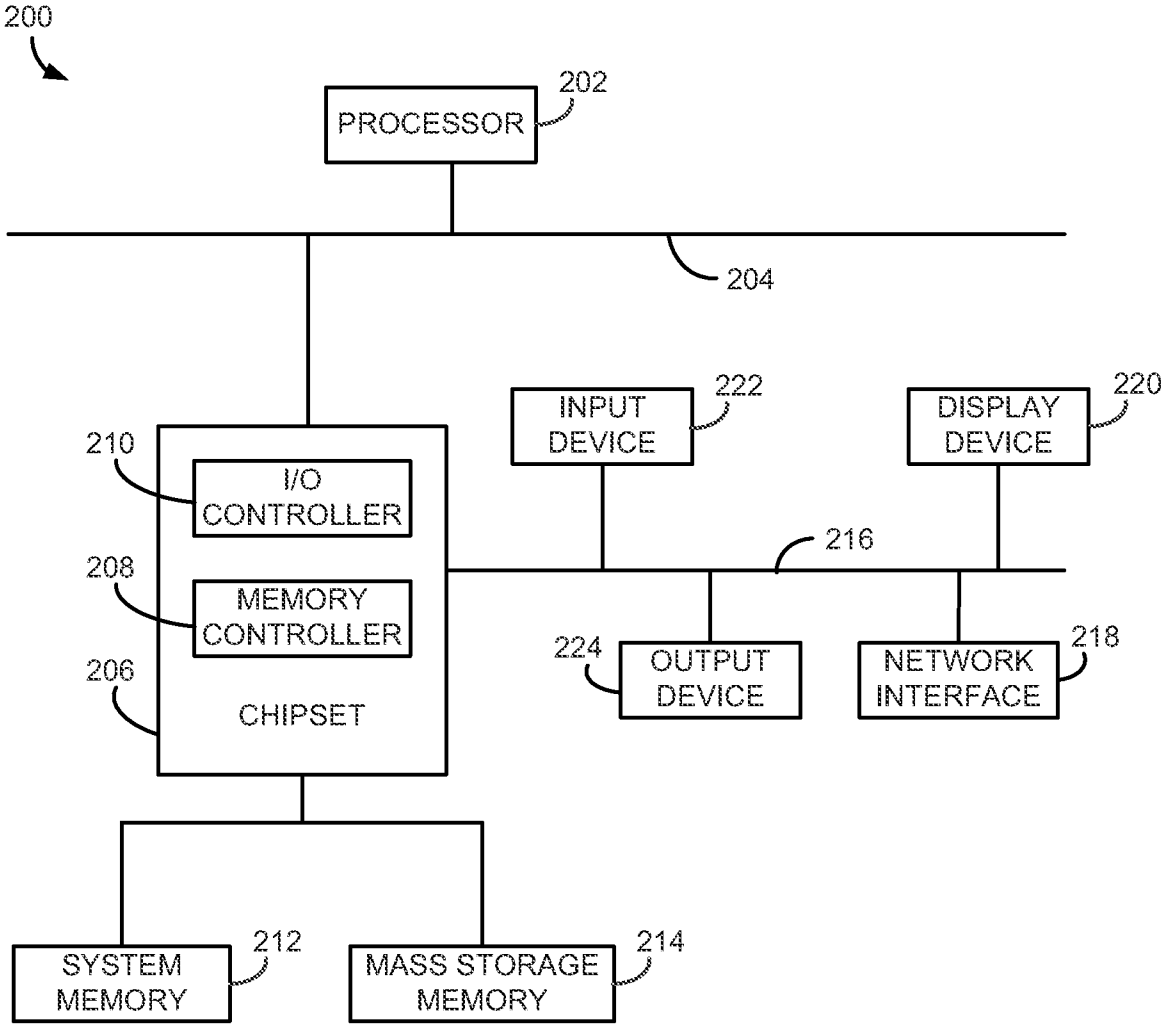

200
PROCESSOR
202
204
INPUT DEVICE
222
DISPLAY DEVICE
220
210
I/O CONTROLLER
208
MEMORY CONTROLLER
206
CHIPSET
216
224
OUTPUT DEVICE
NETWORK INTERFACE
218
SYSTEM MEMORY
212
MASS STORAGE MEMORY
214

FIGURE 2

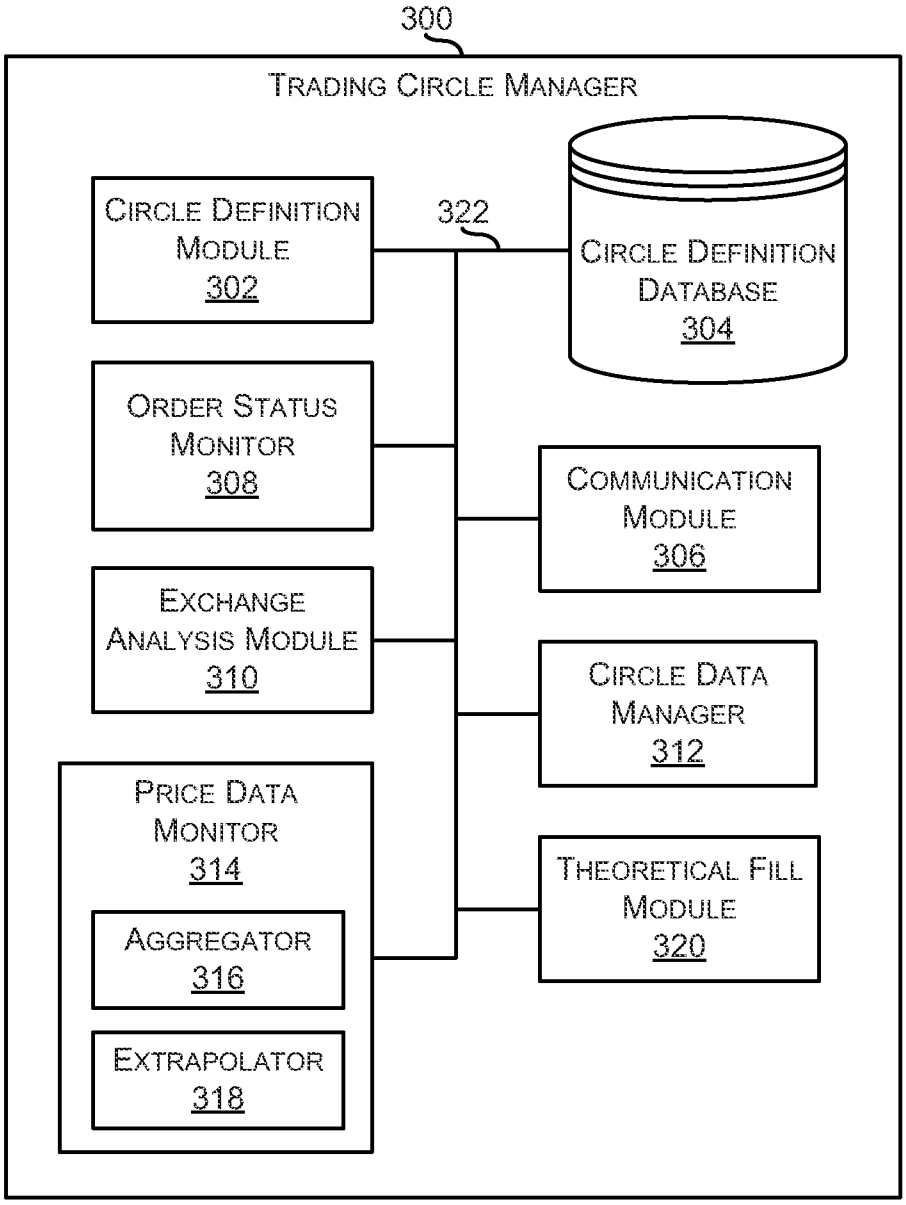

300
TRADING CIRCLE MANAGER
CIRCLE DEFINITION MODULE 302
322
CIRCLE DEFINITION DATABASE 304
ORDER STATUS MONITOR 308
COMMUNICATION MODULE 306
EXCHANGE ANALYSIS MODULE 310
CIRCLE DATA MANAGER 312
PRICE DATA MONITOR 314
AGGREGATOR 316
EXTRAPOLATOR 318
THEORETICAL FILL MODULE 320

FIGURE 3

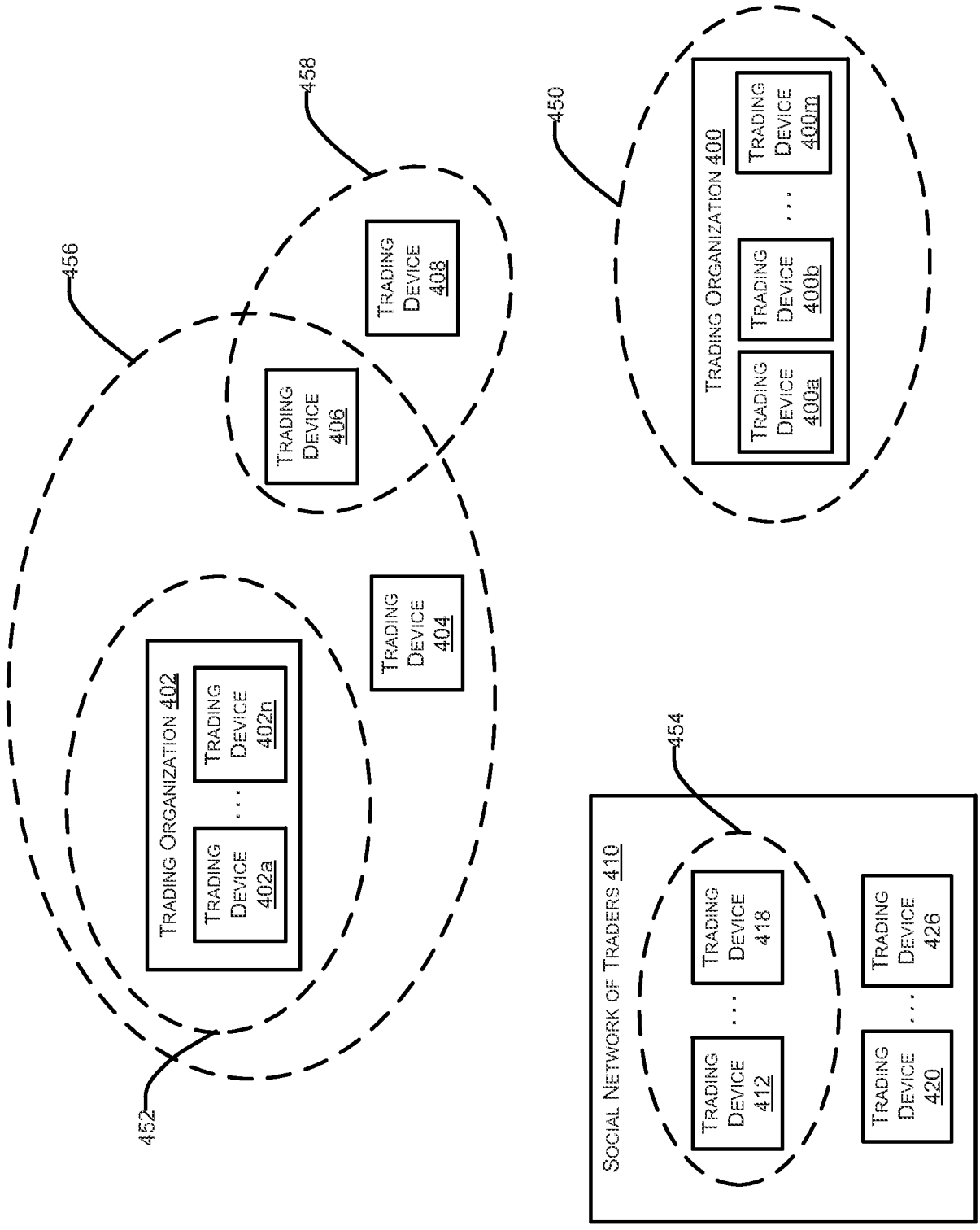

450
TRADING ORGANIZATION 400
TRADING DEVICE 400a
TRADING DEVICE 400b
TRADING DEVICE 400m
452
456
458
TRADING ORGANIZATION 402
TRADING DEVICE 402a
TRADING DEVICE 402n
TRADING DEVICE 404
TRADING DEVICE 406
TRADING DEVICE 408
454
SOCIAL NETWORK OF TRADERS 410
TRADING DEVICE 412
TRADING DEVICE 418
TRADING DEVICE 420
TRADING DEVICE 426

FIGURE 4A

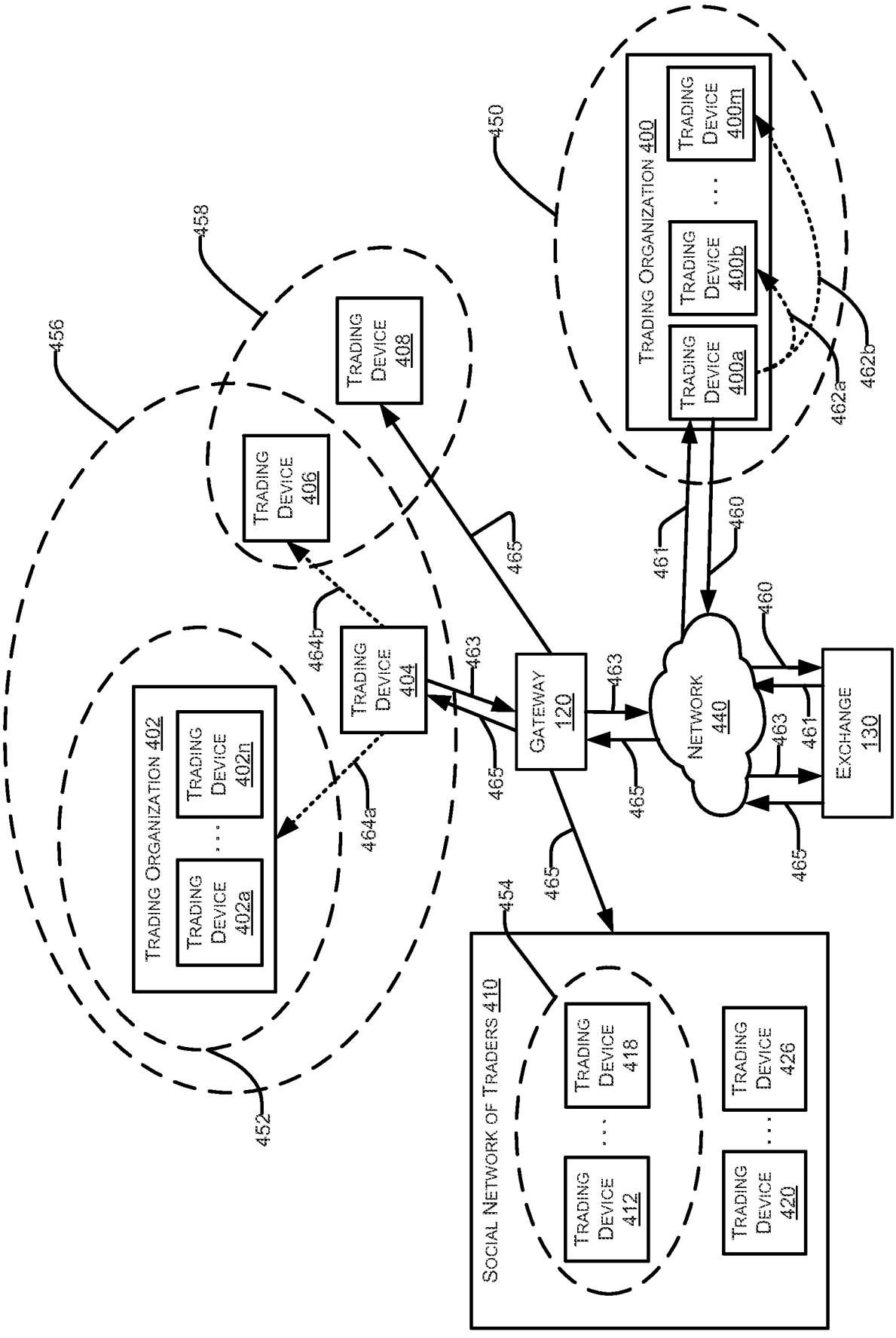

TRADING ORGANIZATION 400
TRADING DEVICE 400a
TRADING DEVICE 400b
TRADING DEVICE 400m
TRADING ORGANIZATION 402
TRADING DEVICE 402a
TRADING DEVICE 402n
TRADING DEVICE 404
TRADING DEVICE 406
TRADING DEVICE 408
GATEWAY 120
NETWORK 440
EXCHANGE 130
SOCIAL NETWORK OF TRADERS 410
TRADING DEVICE 412
TRADING DEVICE 418
TRADING DEVICE 420
TRADING DEVICE 426
450
452
454
456
458
460
461
462a
462b
463
464a
464b
465

FIGURE 4B

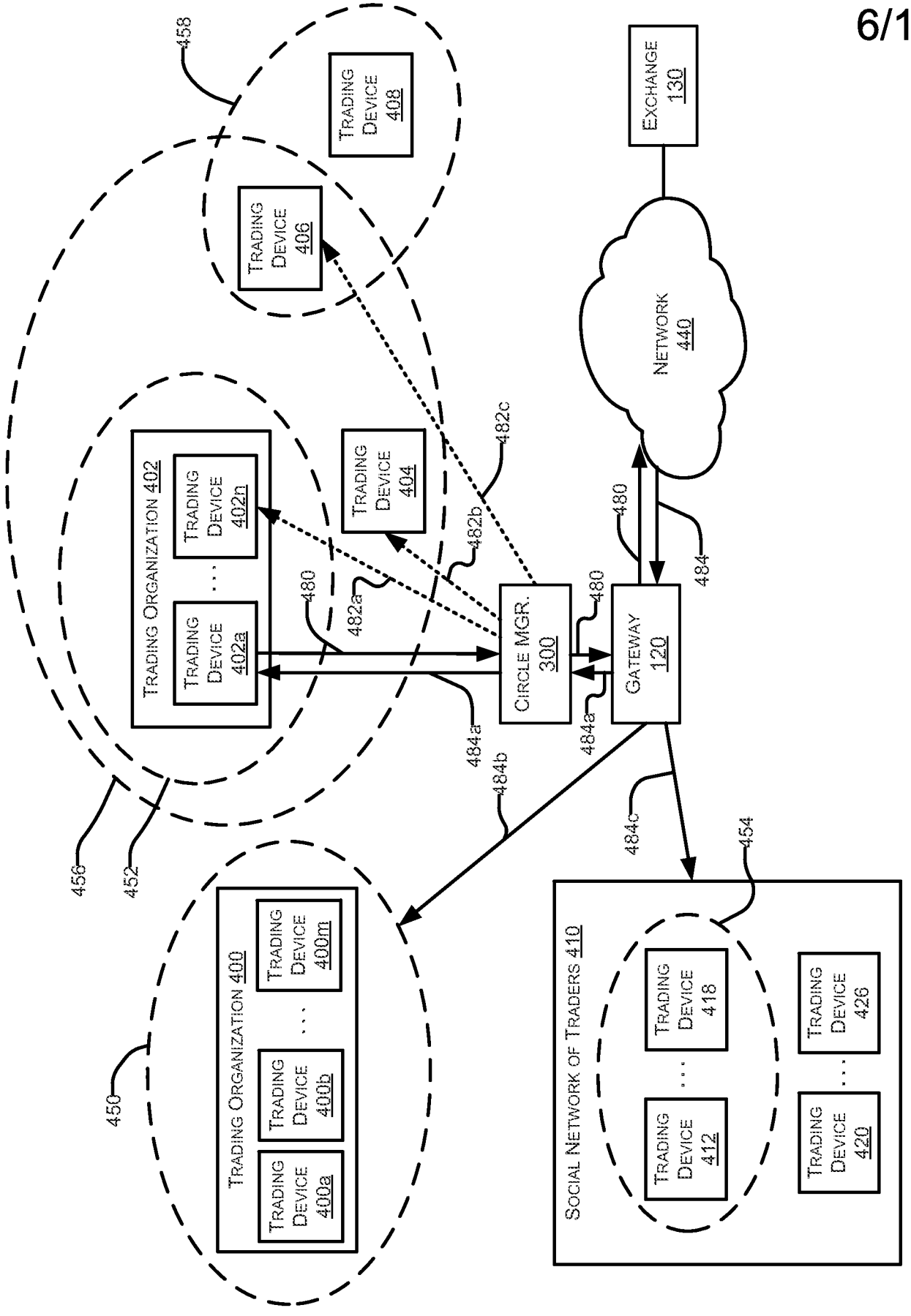

458
TRADING DEVICE 408
TRADING DEVICE 406
TRADING ORGANIZATION 402
TRADING DEVICE 402n
TRADING DEVICE 402a
TRADING DEVICE 404
482c
482b
482a
480
480
480
484
484a
484b
484c
484d
CIRCLE MGR. 300
GATEWAY 120
NETWORK 440
EXCHANGE 130
456
452
450
454
TRADING ORGANIZATION 400
TRADING DEVICE 400m
TRADING DEVICE 400b
TRADING DEVICE 400a
SOCIAL NETWORK OF TRADERS 410
TRADING DEVICE 418
TRADING DEVICE 412
TRADING DEVICE 426
TRADING DEVICE 420

FIGURE 4C

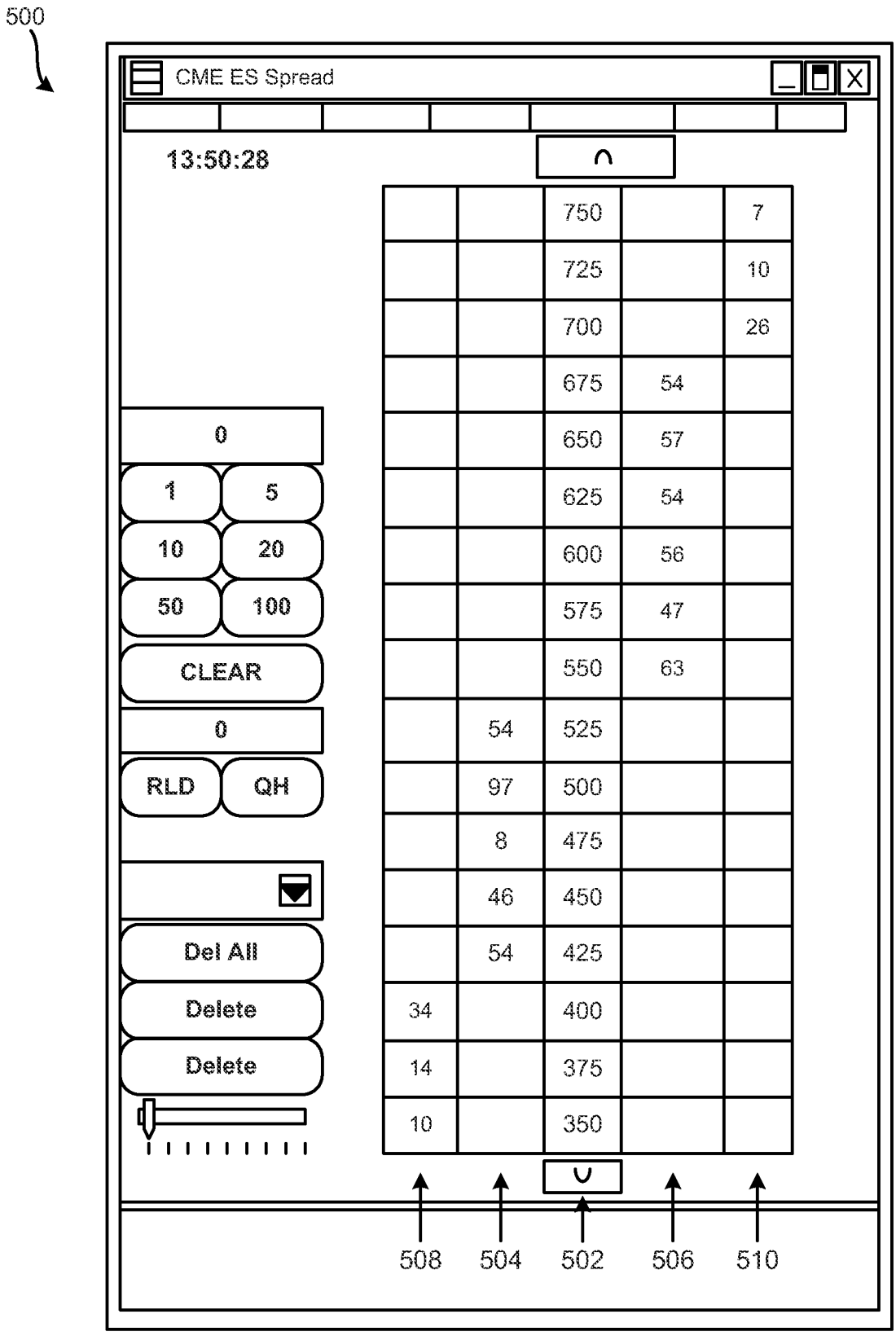

500
CME ES Spread
13:50:28
0
1
5
10
20
50
100
CLEAR
0
RLD
QH
Del All
Delete
Delete
750 7
725 10
700 26
675 54
650 57
625 54
600 56
575 47
550 63
54 525
97 500
8 475
46 450
54 425
34 400
14 375
10 350
508
504
502
506
510

FIGURE 5

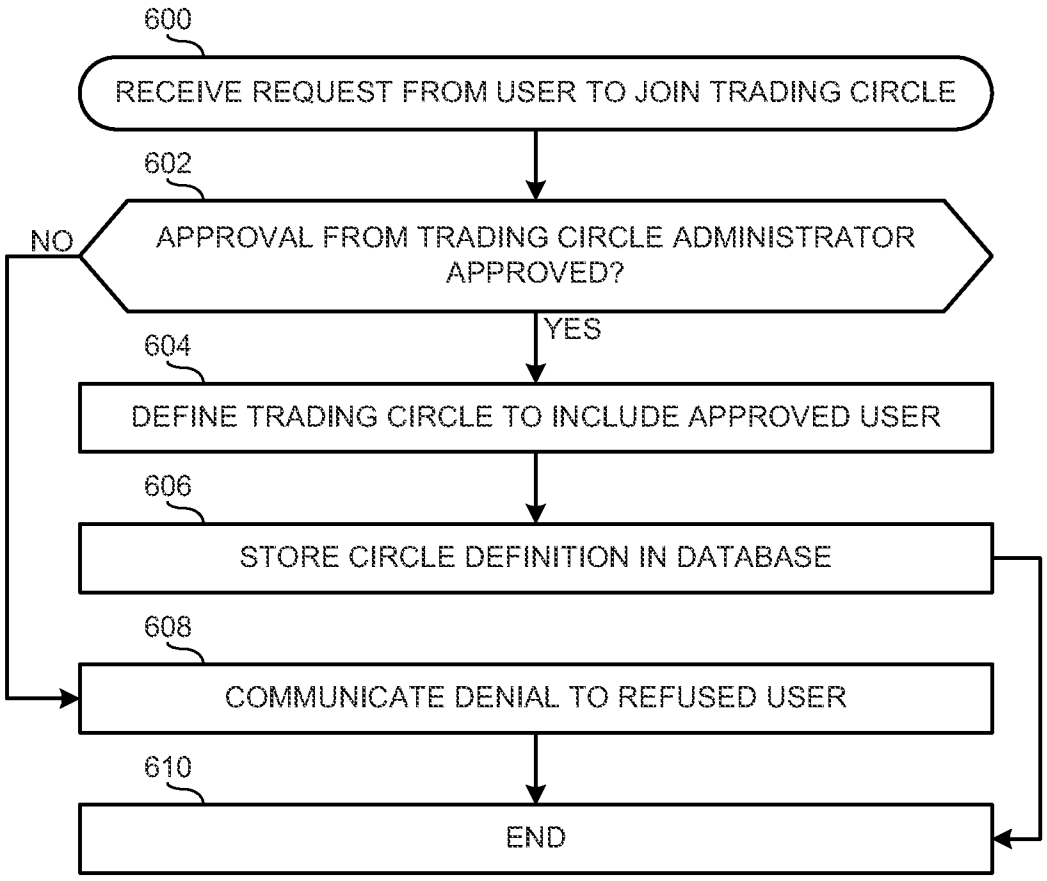

600
RECEIVE REQUEST FROM USER TO JOIN TRADING CIRCLE
602
APPROVAL FROM TRADING CIRCLE ADMINISTRATOR APPROVED?
NO
YES
604
DEFINE TRADING CIRCLE TO INCLUDE APPROVED USER
606
STORE CIRCLE DEFINITION IN DATABASE
608
COMMUNICATE DENIAL TO REFUSED USER
610
END

FIGURE 6

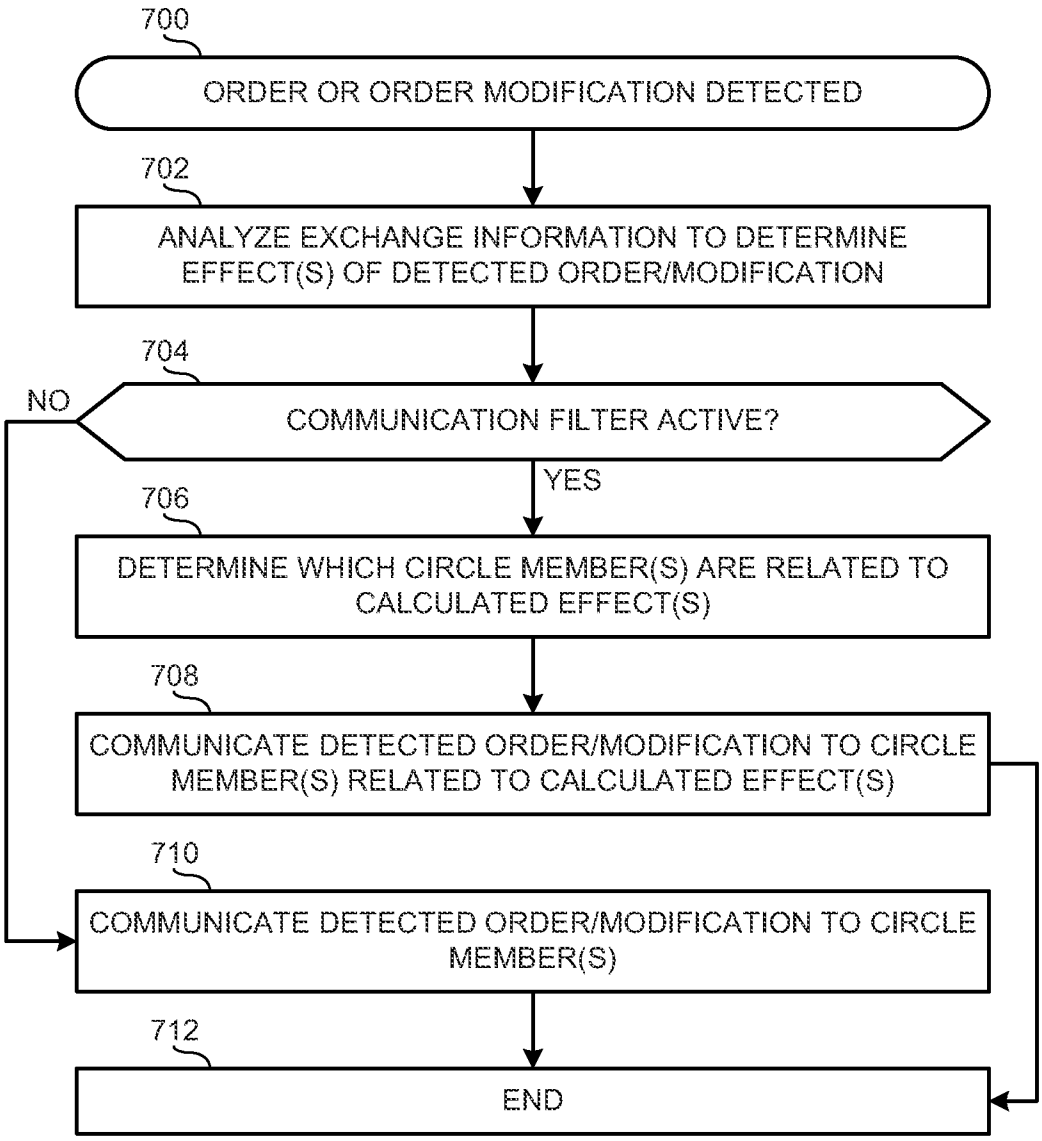

700
ORDER OR ORDER MODIFICATION DETECTED
702
ANALYZE EXCHANGE INFORMATION TO DETERMINE EFFECT(S) OF DETECTED ORDER/MODIFICATION
704
NO
COMMUNICATION FILTER ACTIVE?
YES
706
DETERMINE WHICH CIRCLE MEMBER(S) ARE RELATED TO CALCULATED EFFECT(S)
708
COMMUNICATE DETECTED ORDER/MODIFICATION TO CIRCLE MEMBER(S) RELATED TO CALCULATED EFFECT(S)
710
COMMUNICATE DETECTED ORDER/MODIFICATION TO CIRCLE MEMBER(S)
712
END

FIGURE 7

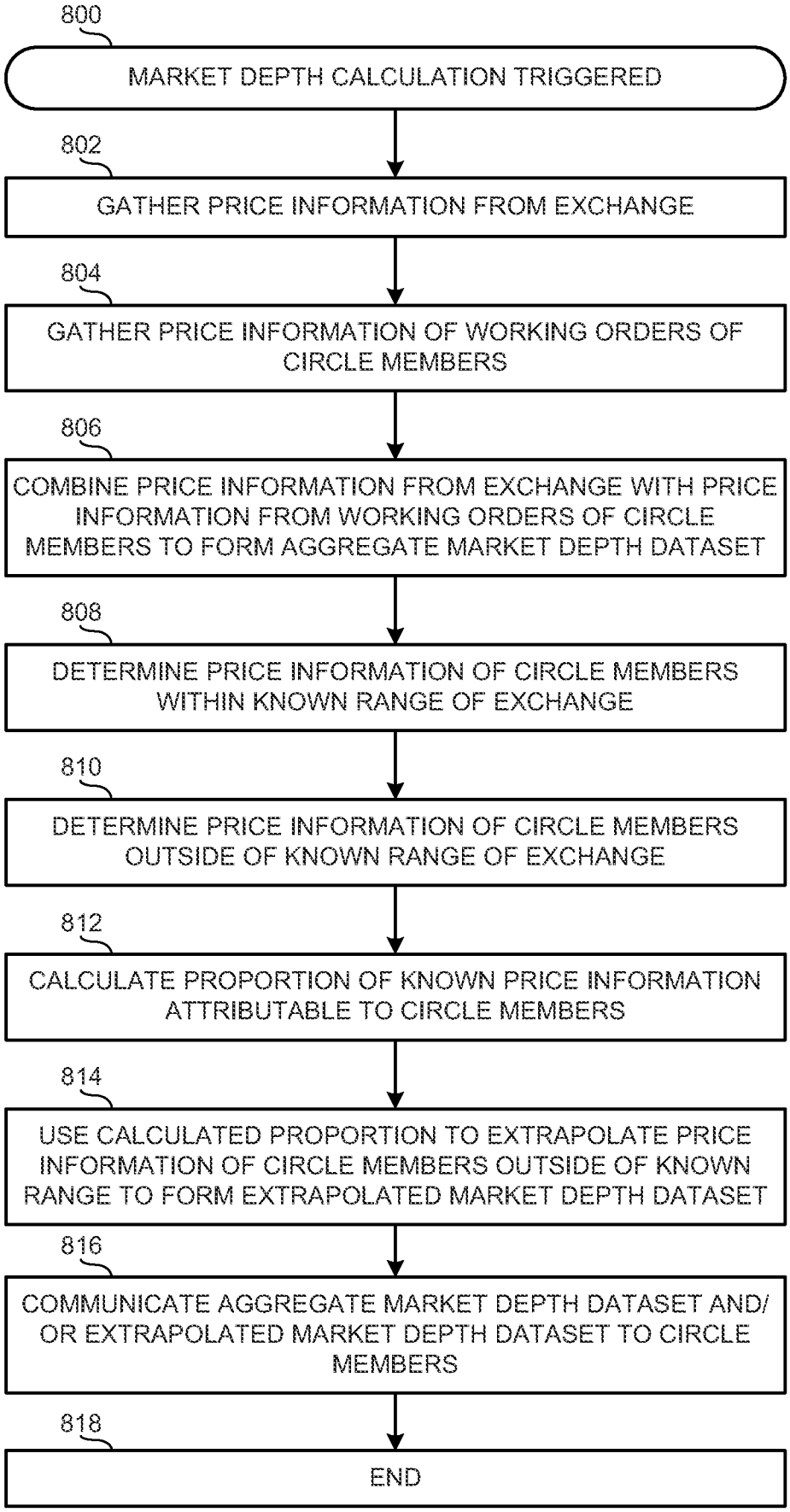

800
MARKET DEPTH CALCULATION TRIGGERED
802
GATHER PRICE INFORMATION FROM EXCHANGE
804
GATHER PRICE INFORMATION OF WORKING ORDERS OF CIRCLE MEMBERS
806
COMBINE PRICE INFORMATION FROM EXCHANGE WITH PRICE INFORMATION FROM WORKING ORDERS OF CIRCLE MEMBERS TO FORM AGGREGATE MARKET DEPTH DATASET
808
DETERMINE PRICE INFORMATION OF CIRCLE MEMBERS WITHIN KNOWN RANGE OF EXCHANGE
810
DETERMINE PRICE INFORMATION OF CIRCLE MEMBERS OUTSIDE OF KNOWN RANGE OF EXCHANGE
812
CALCULATE PROPORTION OF KNOWN PRICE INFORMATION ATTRIBUTABLE TO CIRCLE MEMBERS
814
USE CALCULATED PROPORTION TO EXTRAPOLATE PRICE INFORMATION OF CIRCLE MEMBERS OUTSIDE OF KNOWN RANGE TO FORM EXTRAPOLATED MARKET DEPTH DATASET
816
COMMUNICATE AGGREGATE MARKET DEPTH DATASET AND/OR EXTRAPOLATED MARKET DEPTH DATASET TO CIRCLE MEMBERS
818
END

FIGURE 8