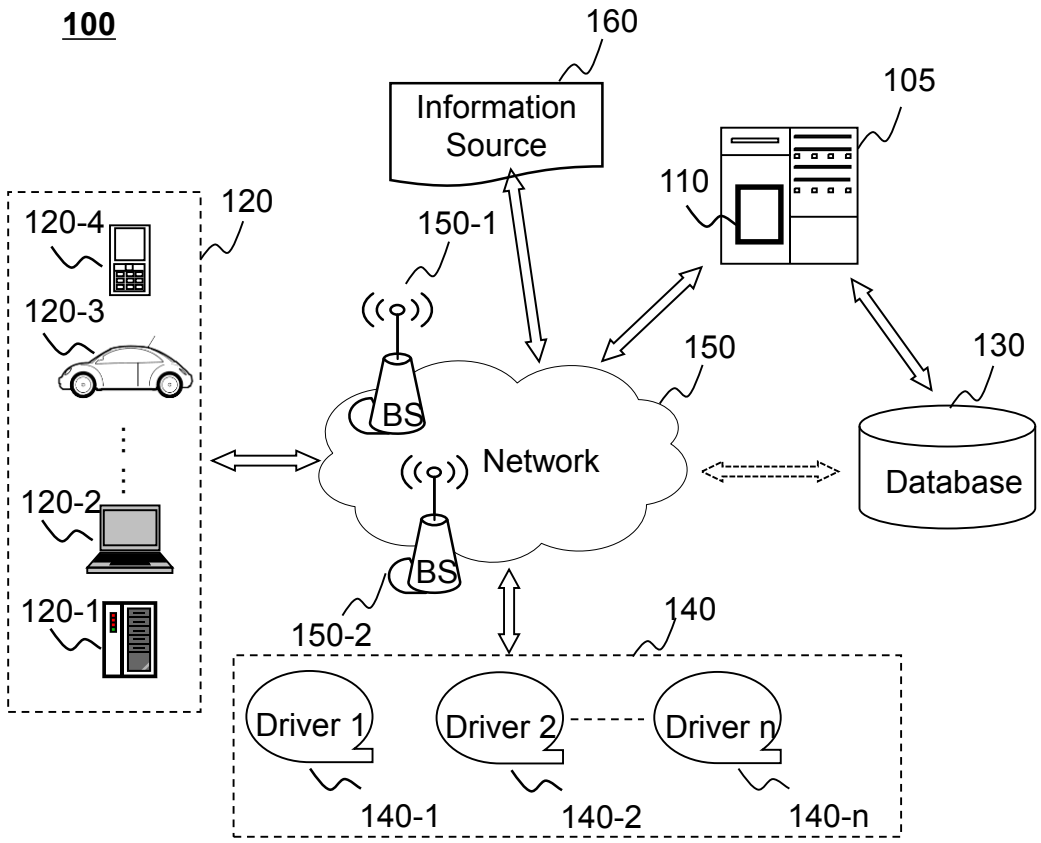

100
160
Information Source
105
110
120
120-4
150-1
120-3
150
130
BS
Network
Database
120-2
BS
120-1
150-2
140
Driver 1
Driver 2
Driver n
140-1
140-2
140-n

FIG. 1

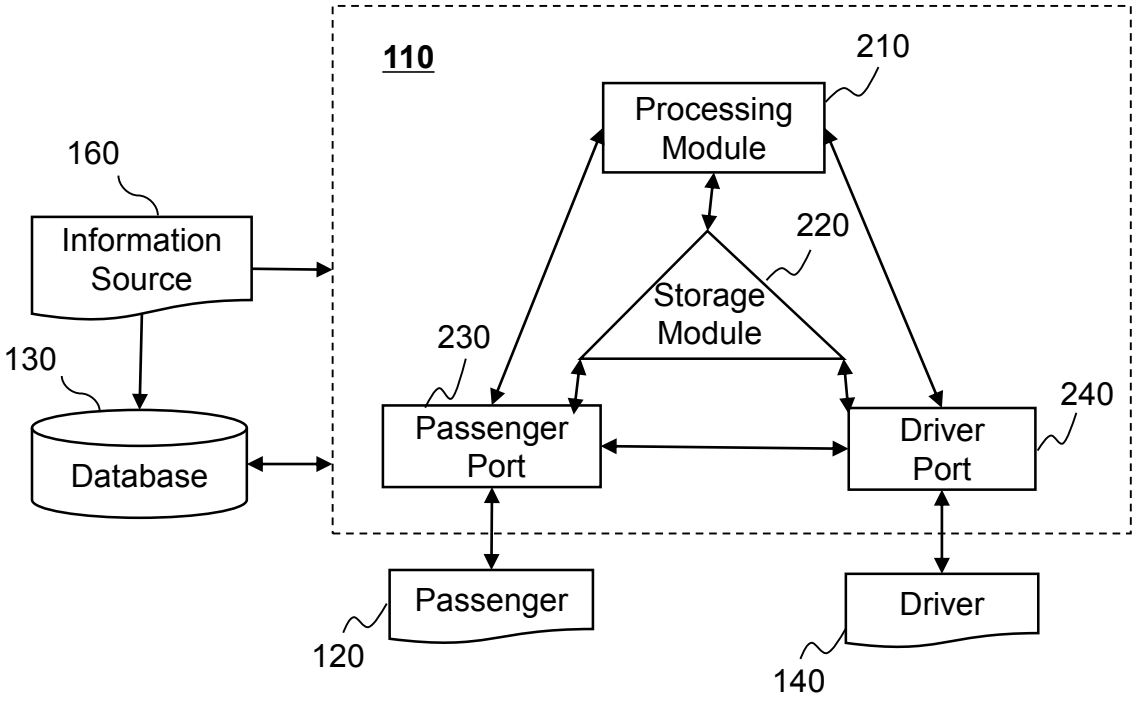

110
210
Processing Module
160
Information Source
220
Storage Module
230
130
240
Passenger Port
Driver Port
Database
Passenger
Driver
120
140

FIG. 2

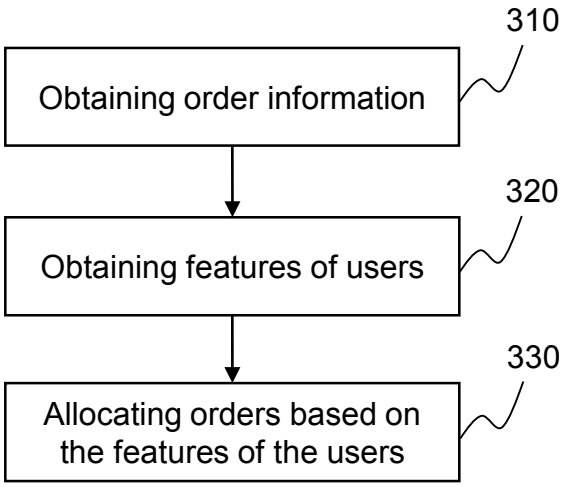

310
Obtaining order information
320
Obtaining features of users
330
Allocating orders based on the features of the users

FIG. 3

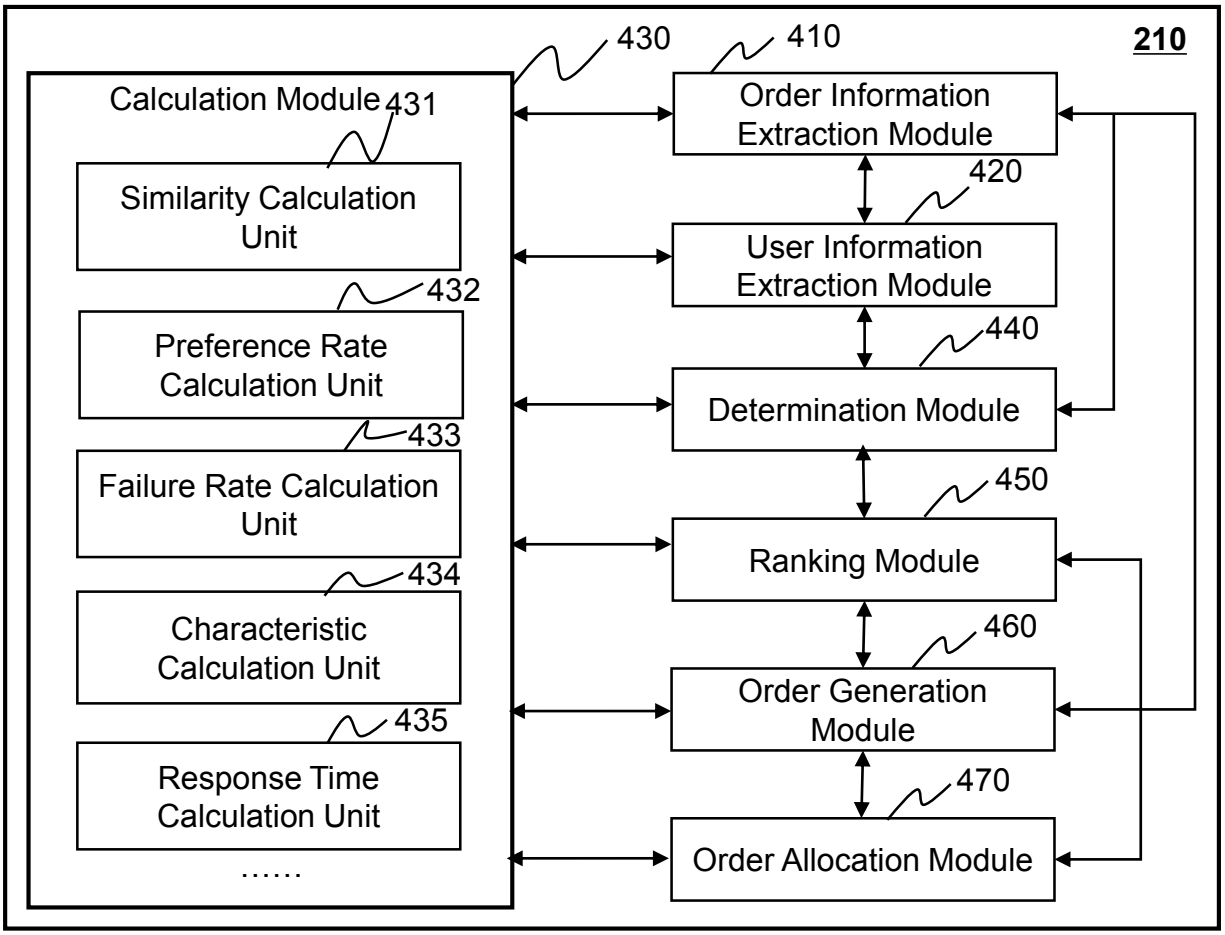

210
430
410
Calculation Module
431
Similarity Calculation Unit
432
Preference Rate Calculation Unit
433
Failure Rate Calculation Unit
434
Characteristic Calculation Unit
435
Response Time Calculation Unit
……
Order Information Extraction Module
420
User Information Extraction Module
440
Determination Module
450
Ranking Module
460
Order Generation Module
470
Order Allocation Module

FIG. 4-A

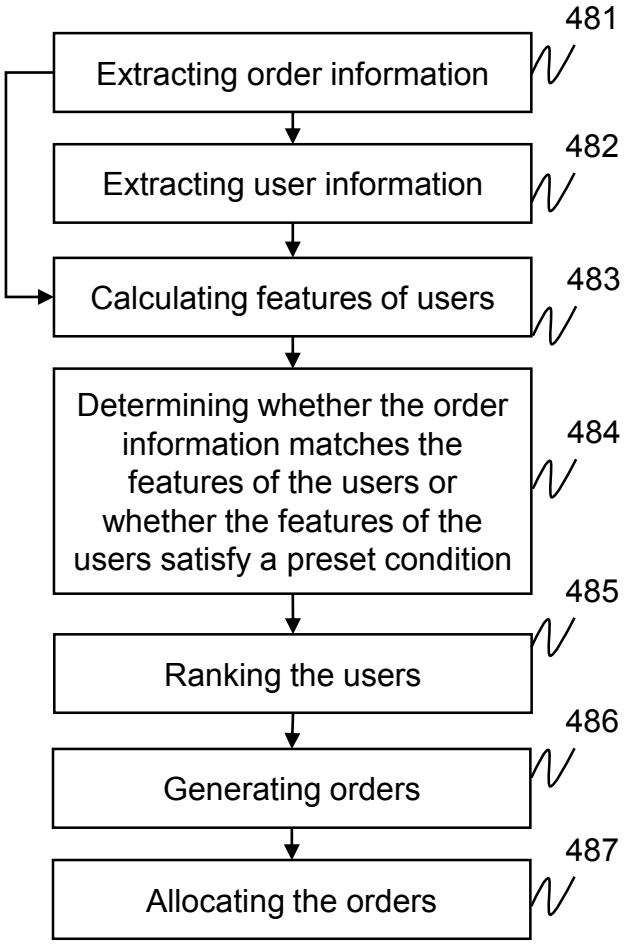

481
Extracting order information
482
Extracting user information
483
Calculating features of users
484
Determining whether the order information matches the features of the users or whether the features of the users satisfy a preset condition
485
Ranking the users
486
Generating orders
487
Allocating the orders

FIG. 4-B

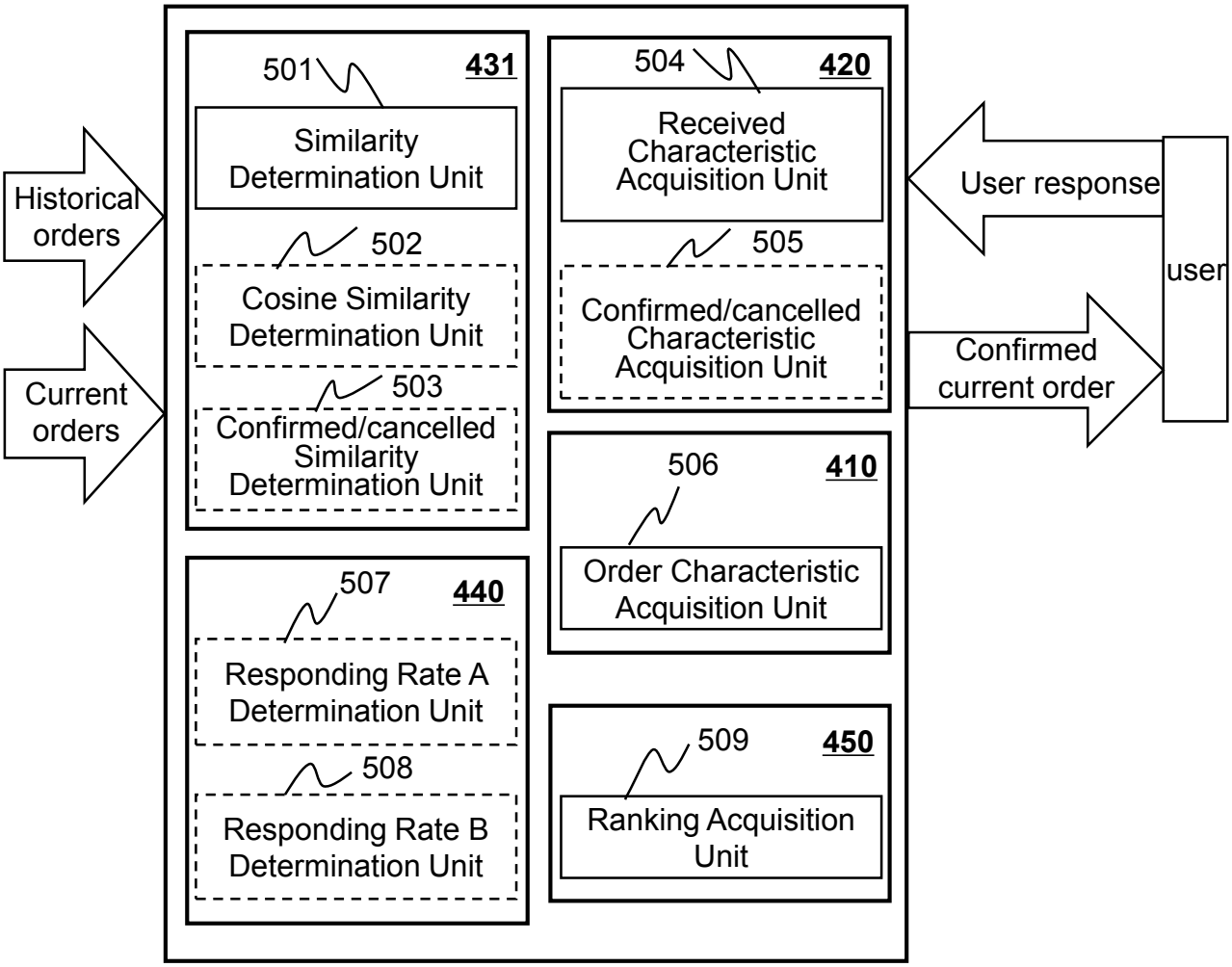

Historical orders
Current orders
501
431
Similarity Determination Unit
502
Cosine Similarity Determination Unit
503
Confirmed/cancelled Similarity Determination Unit
504
420
Received Characteristic Acquisition Unit
505
Confirmed/cancelled Characteristic Acquisition Unit
506
410
Order Characteristic Acquisition Unit
507
440
Responding Rate A Determination Unit
508
Responding Rate B Determination Unit
509
450
Ranking Acquisition Unit
User response
Confirmed current order
user

FIG. 5

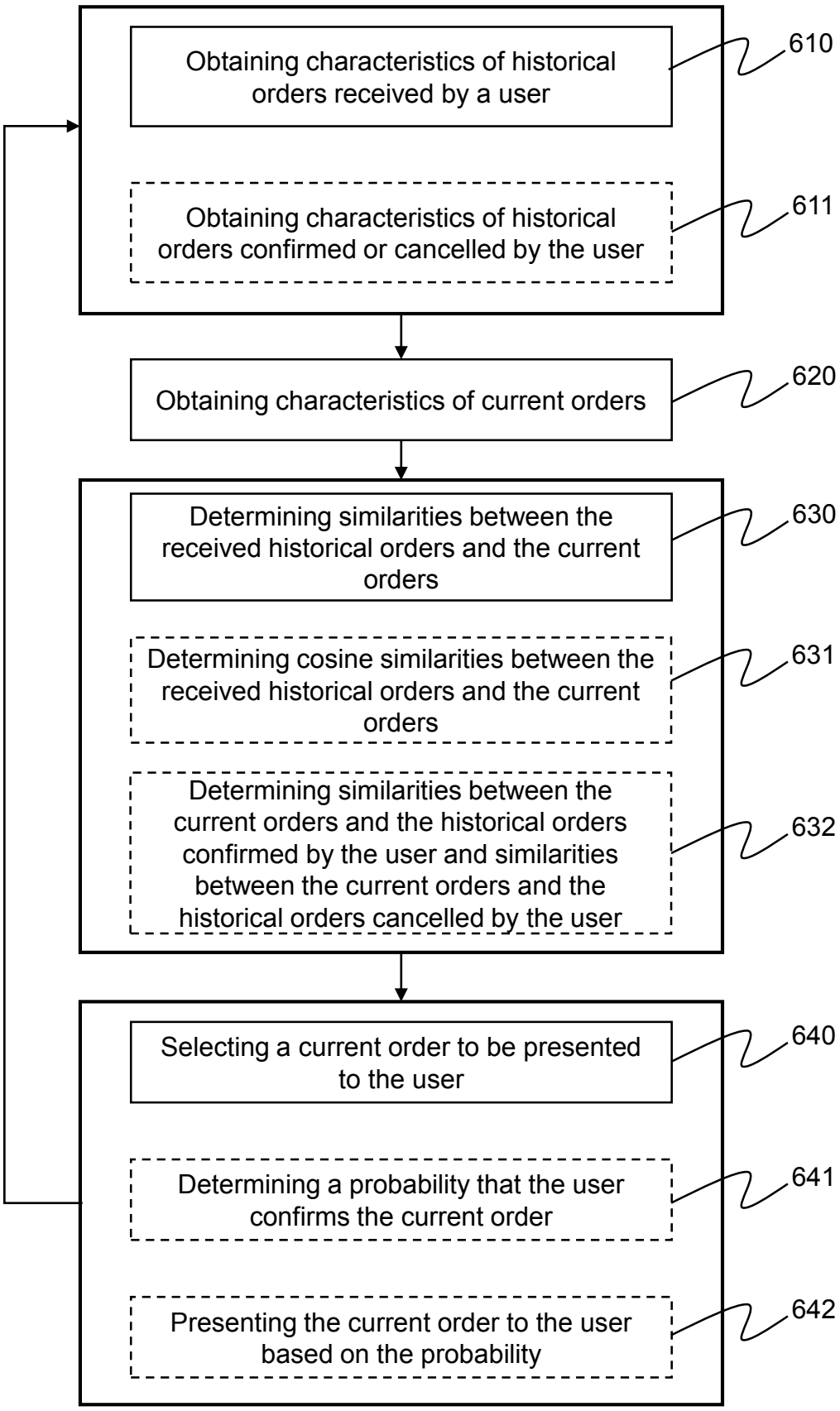

Obtaining characteristics of historical orders received by a user
610
Obtaining characteristics of historical orders confirmed or cancelled by the user
611
Obtaining characteristics of current orders
620
Determining similarities between the received historical orders and the current orders
630
Determining cosine similarities between the received historical orders and the current orders
631
Determining similarities between the current orders and the historical orders confirmed by the user and similarities between the current orders and the historical orders cancelled by the user
632
Selecting a current order to be presented to the user
640
Determining a probability that the user confirms the current order
641
Presenting the current order to the user based on the probability
642

FIG. 6

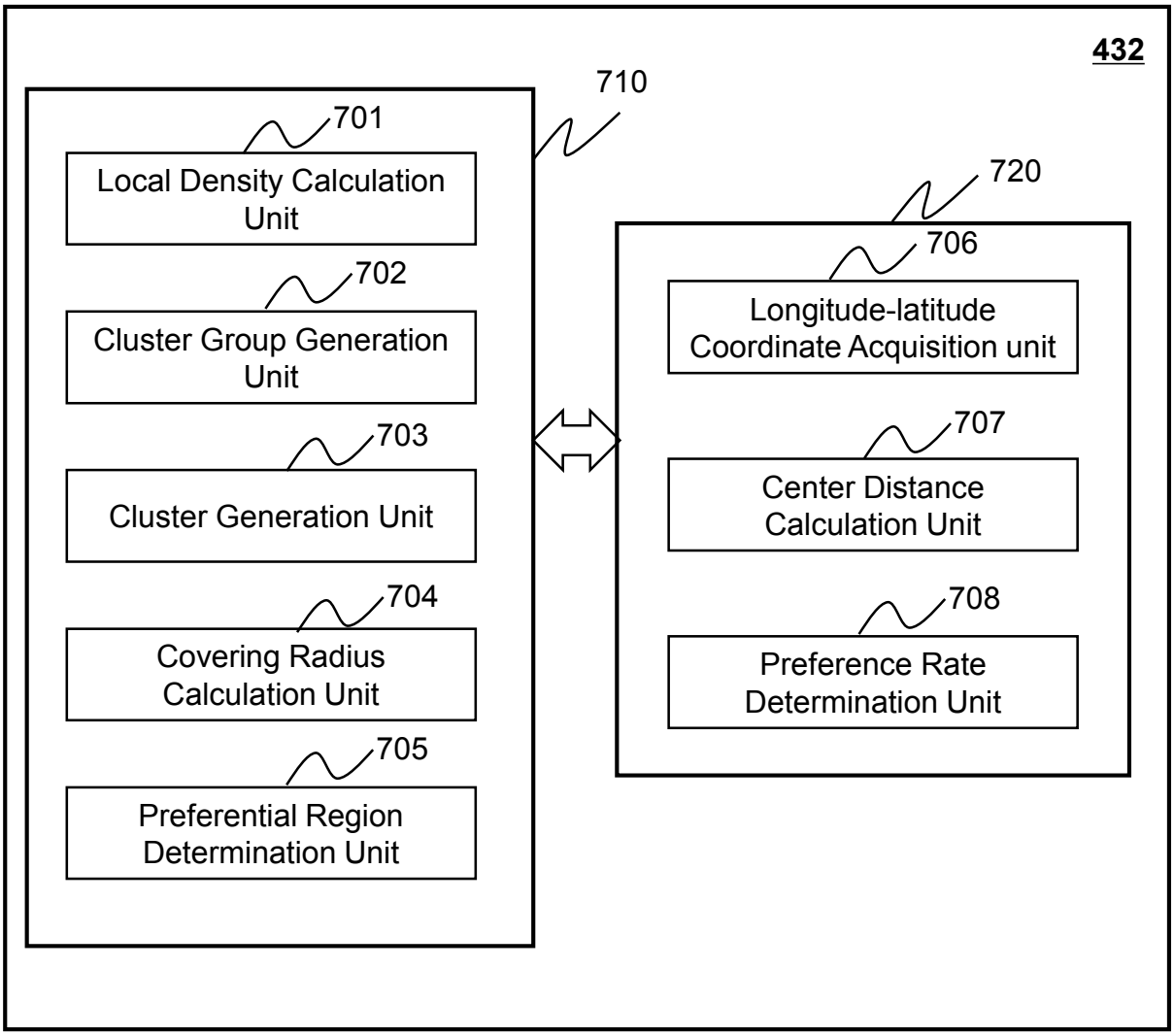

432
710
701
Local Density Calculation Unit
702
Cluster Group Generation Unit
703
Cluster Generation Unit
704
Covering Radius Calculation Unit
705
Preferential Region Determination Unit
720
706
Longitude-latitude Coordinate Acquisition unit
707
Center Distance Calculation Unit
708
Preference Rate Determination Unit

FIG. 7

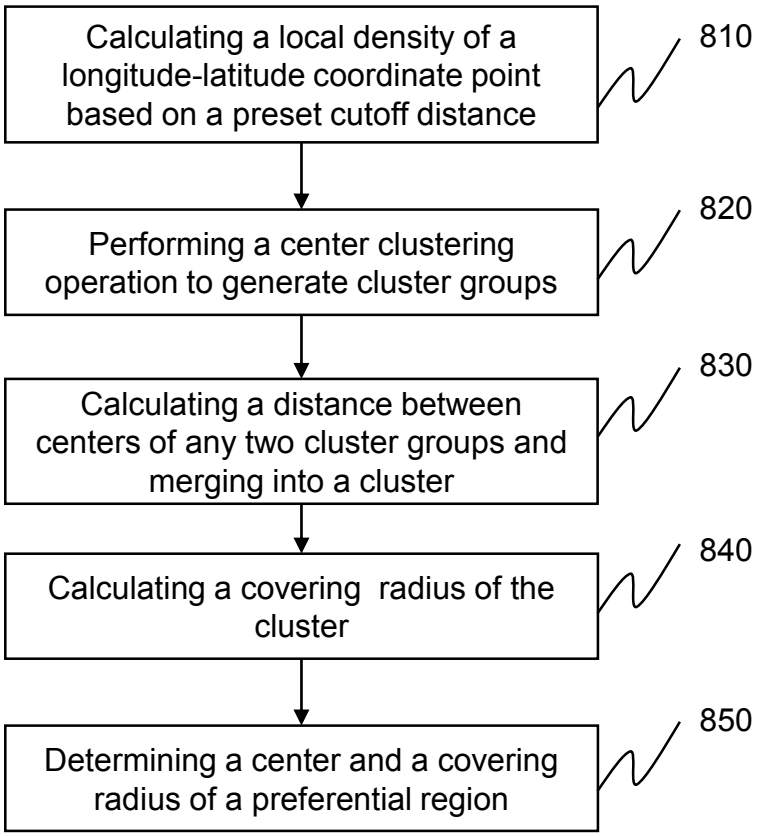

Calculating a local density of a longitude-latitude coordinate point based on a preset cutoff distance
810
Performing a center clustering operation to generate cluster groups
820
Calculating a distance between centers of any two cluster groups and merging into a cluster
830
Calculating a covering radius of the cluster
840
Determining a center and a covering radius of a preferential region
850

FIG. 8

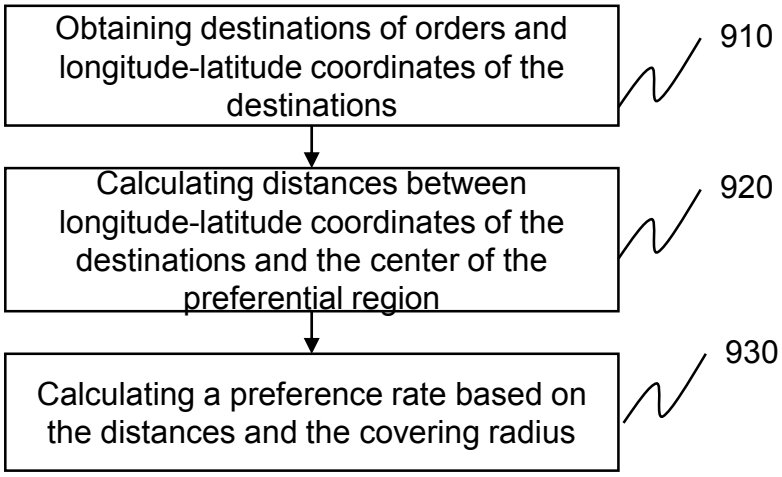

Obtaining destinations of orders and longitude-latitude coordinates of the destinations
910
Calculating distances between longitude-latitude coordinates of the destinations and the center of the preferential region
920
Calculating a preference rate based on the distances and the covering radius
930

FIG. 9

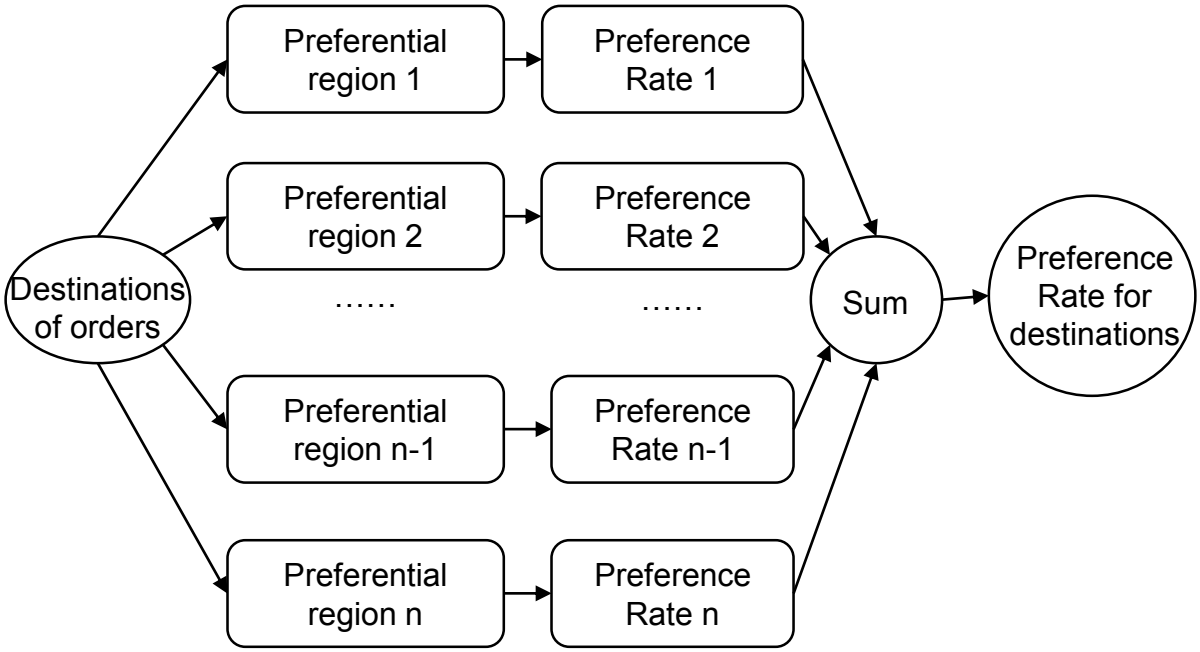

Destinations of orders
Preferential region 1
Preference Rate 1
Preferential region 2
Preference Rate 2
……
……
Preferential region n-1
Preference Rate n-1
Preferential region n
Preference Rate n
Sum
Preference Rate for destinations

FIG. 10

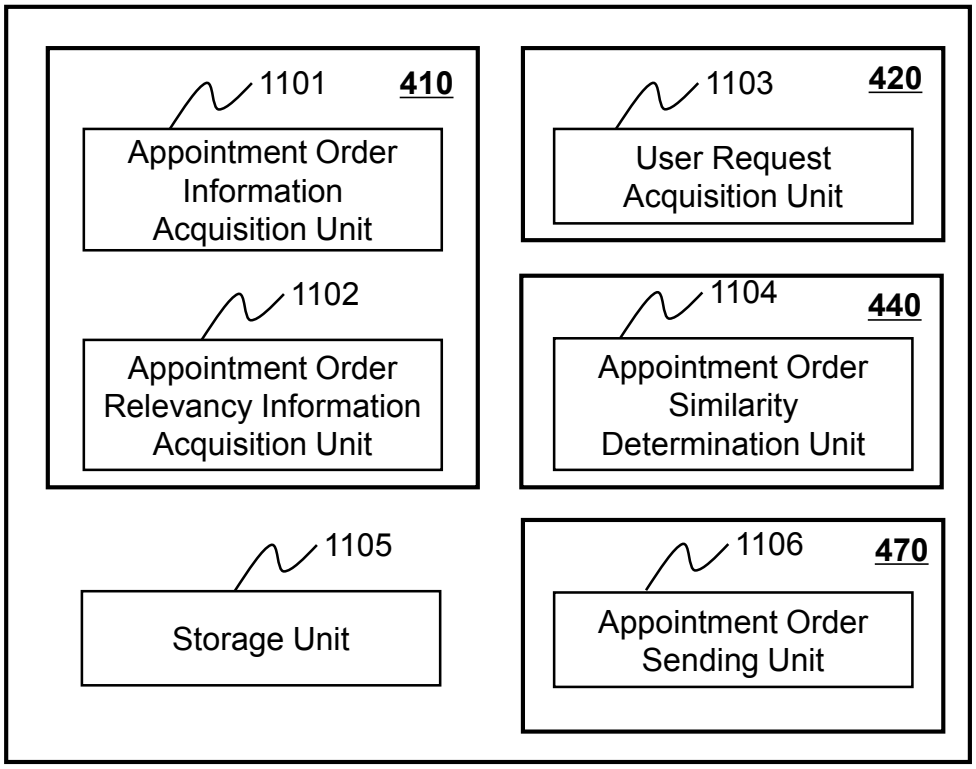

1101
410
Appointment Order Information Acquisition Unit
1102
Appointment Order Relevancy Information Acquisition Unit
1103
420
User Request Acquisition Unit
1104
440
Appointment Order Similarity Determination Unit
1105
Storage Unit
1106
470
Appointment Order Sending Unit

FIG. 11

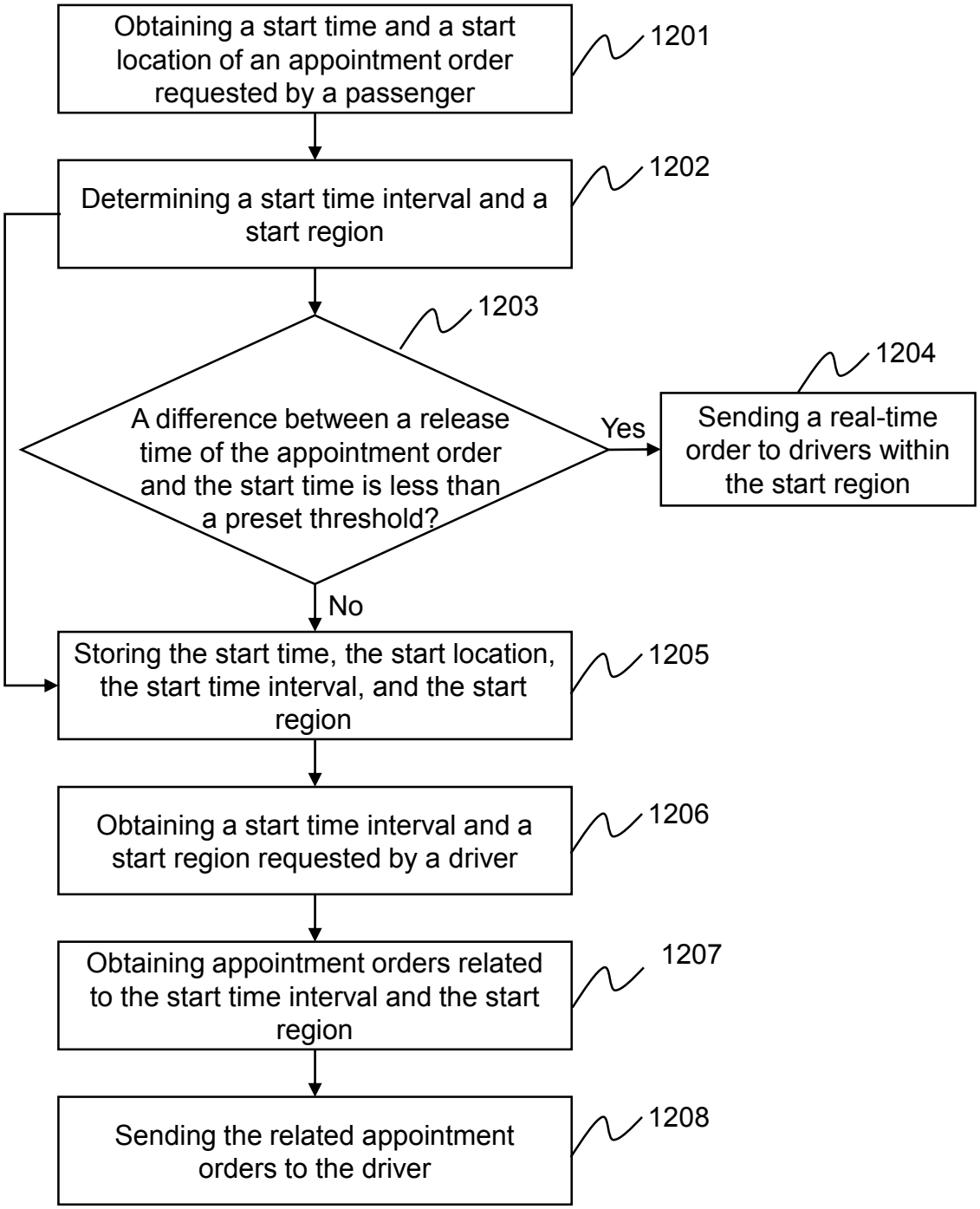

Obtaining a start time and a start location of an appointment order requested by a passenger
1201
Determining a start time interval and a start region
1202
1203
A difference between a release time of the appointment order and the start time is less than a preset threshold?
Yes
1204
Sending a real-time order to drivers within the start region
No
Storing the start time, the start location, the start time interval, and the start region
1205
Obtaining a start time interval and a start region requested by a driver
1206
Obtaining appointment orders related to the start time interval and the start region
1207
Sending the related appointment orders to the driver
1208

FIG. 12

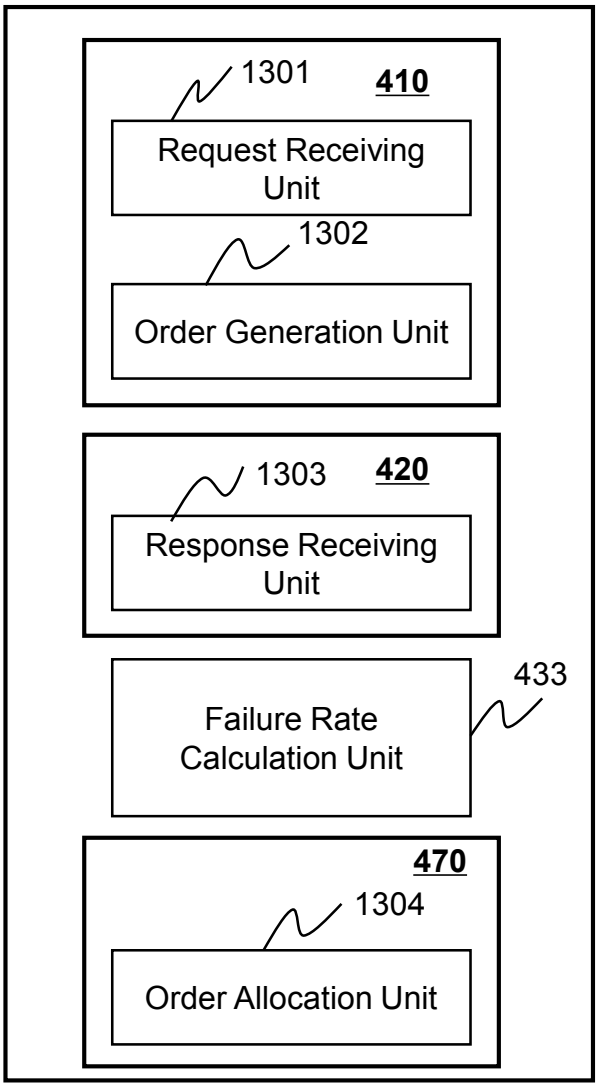

1301
410
Request Receiving Unit
1302
Order Generation Unit
1303
420
Response Receiving Unit
433
Failure Rate Calculation Unit
470
1304
Order Allocation Unit

FIG. 13

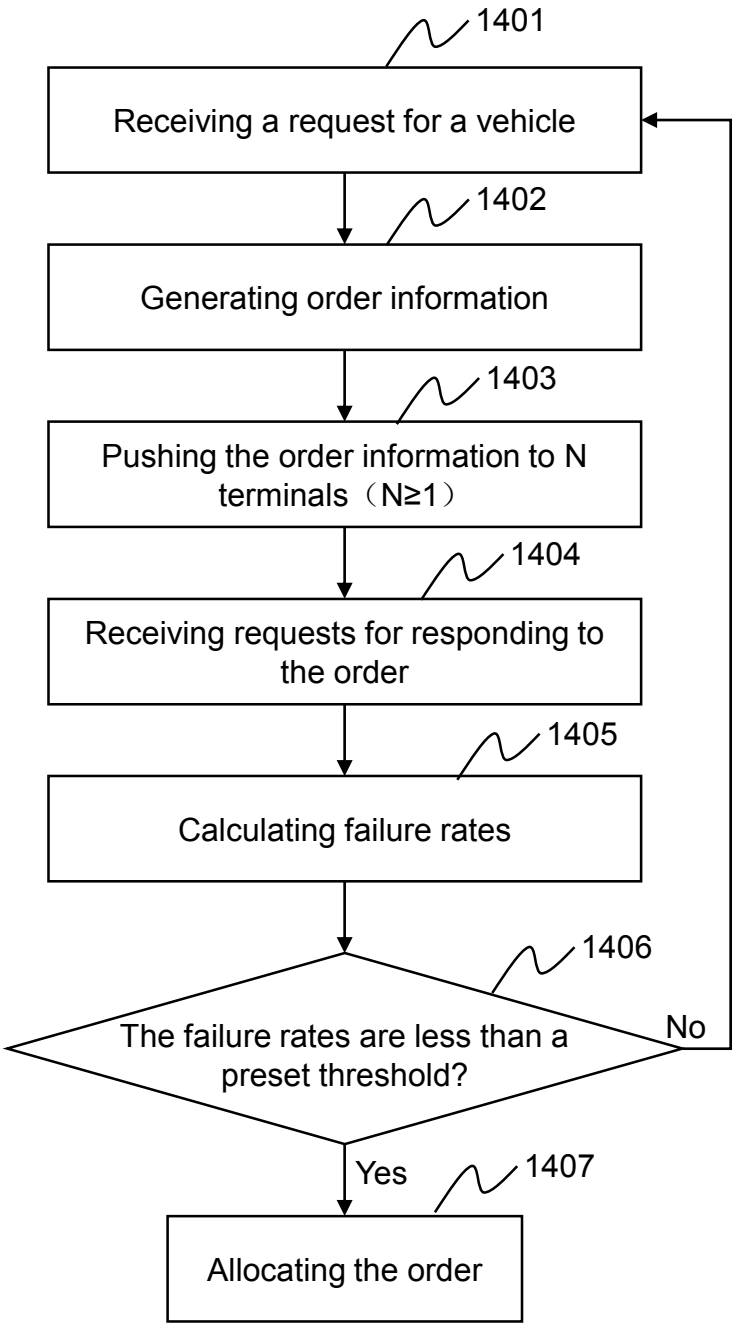

1401
Receiving a request for a vehicle
1402
Generating order information
1403
Pushing the order information to N terminals（N≥1）
1404
Receiving requests for responding to the order
1405
Calculating failure rates
1406
The failure rates are less than a preset threshold?
No
Yes
1407
Allocating the order

FIG. 14

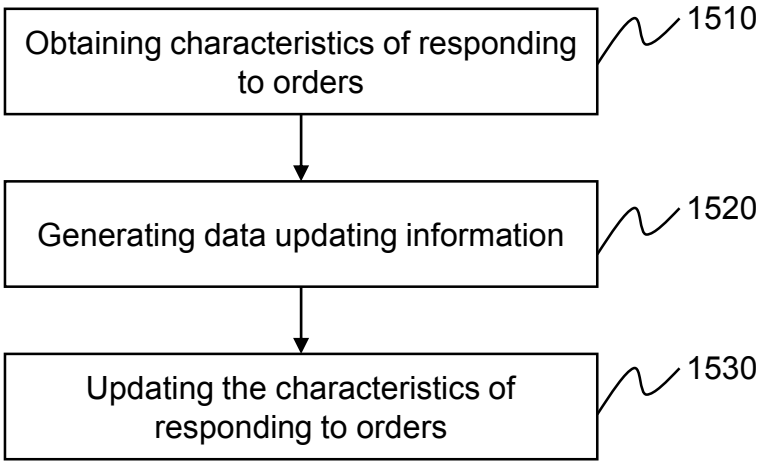

Obtaining characteristics of responding to orders
1510
Generating data updating information
1520
Updating the characteristics of responding to orders
1530

FIG. 15

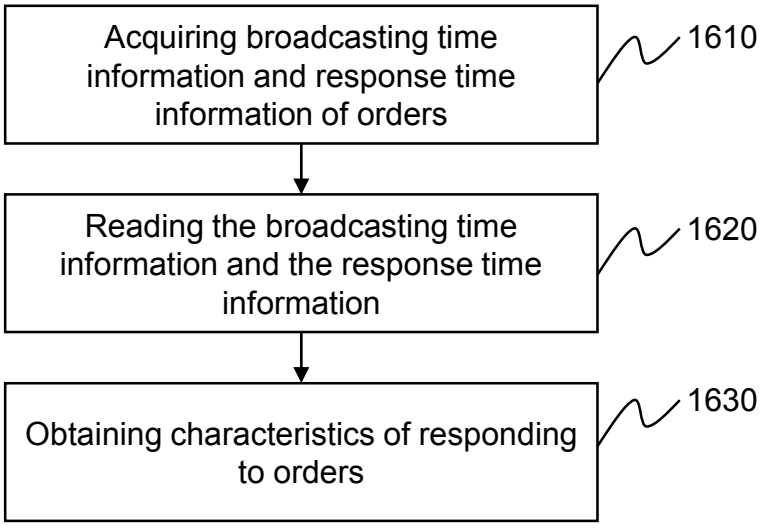

Acquiring broadcasting time information and response time information of orders
1610
Reading the broadcasting time information and the response time information
1620
Obtaining characteristics of responding to orders
1630

FIG. 16

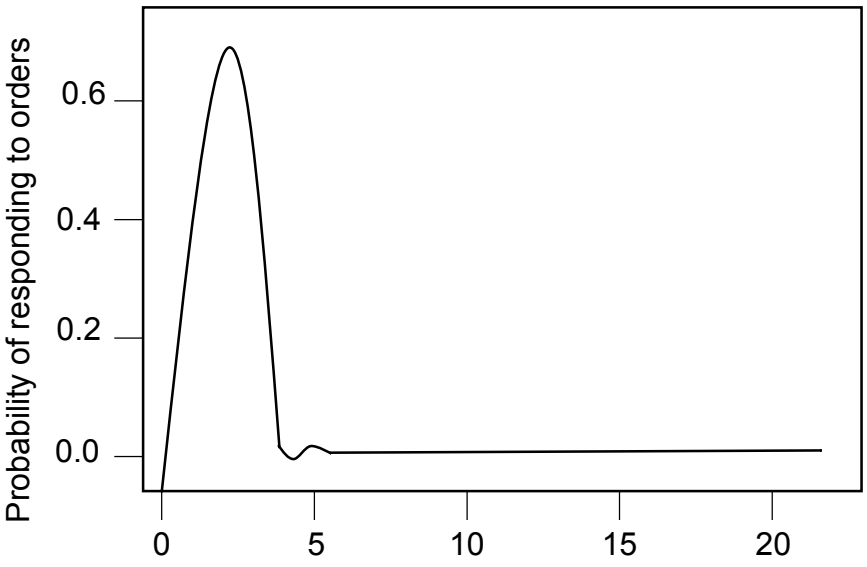


FIG. 17-A

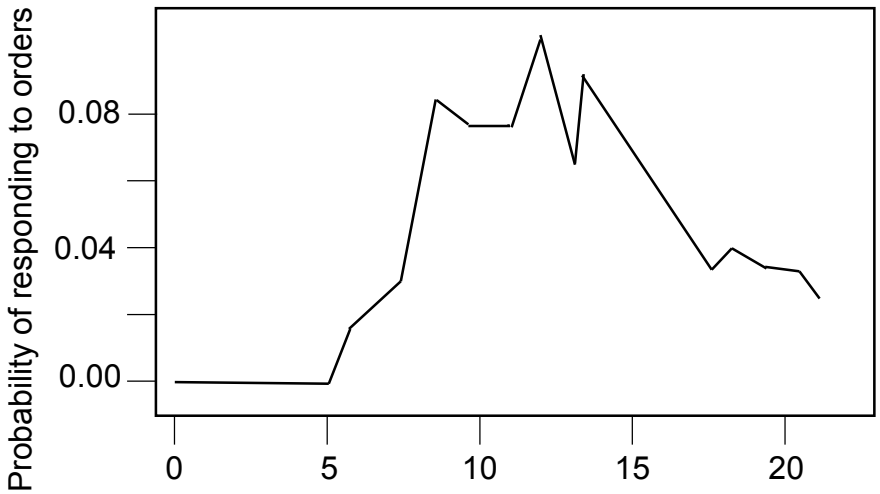


FIG. 17-B

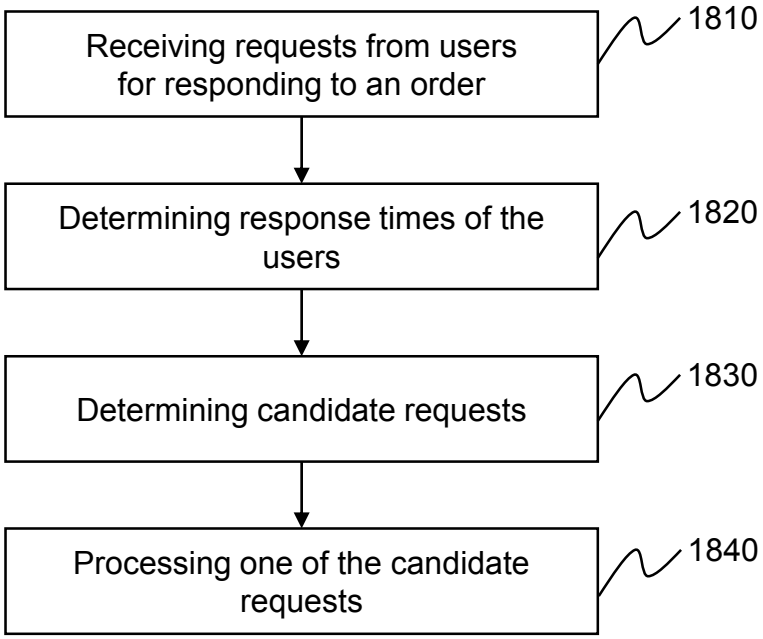

Receiving requests from users for responding to an order
1810
Determining response times of the users
1820
Determining candidate requests
1830
Processing one of the candidate requests
1840

FIG. 18

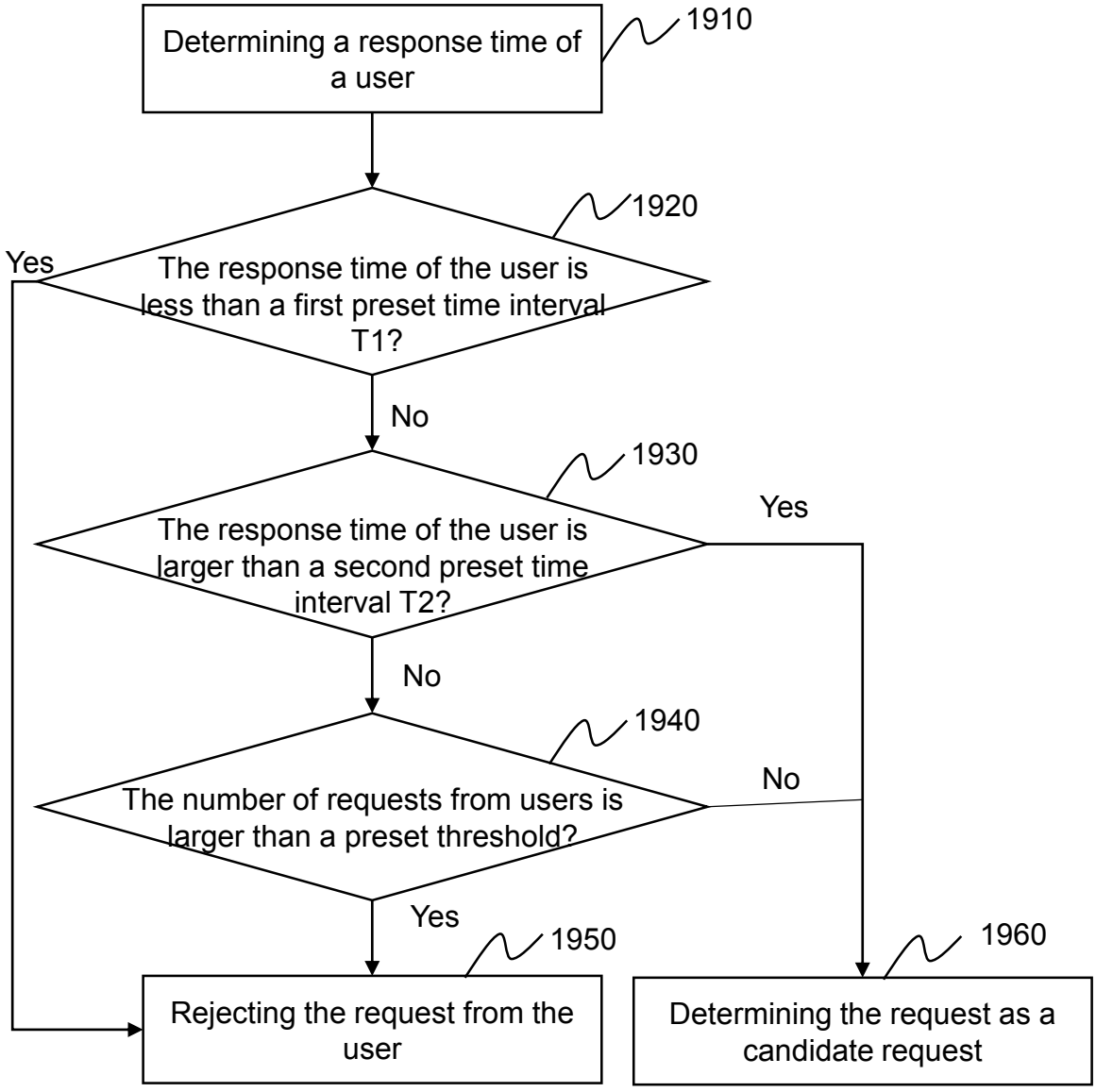

Determining a response time of a user
1910
1920
The response time of the user is less than a first preset time interval T1?
Yes
No
1930
The response time of the user is larger than a second preset time interval T2?
Yes
No
1940
The number of requests from users is larger than a preset threshold?
No
Yes
1950
Rejecting the request from the user
1960
Determining the request as a candidate request

FIG. 19

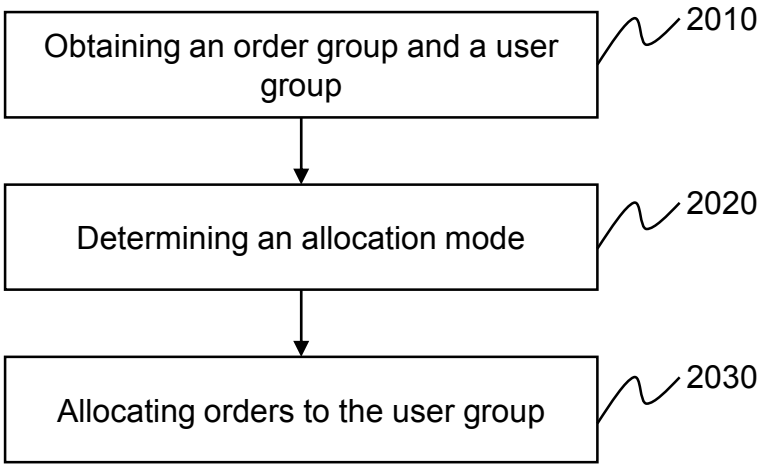

Obtaining an order group and a user group
2010
Determining an allocation mode
2020
Allocating orders to the user group
2030

FIG. 20

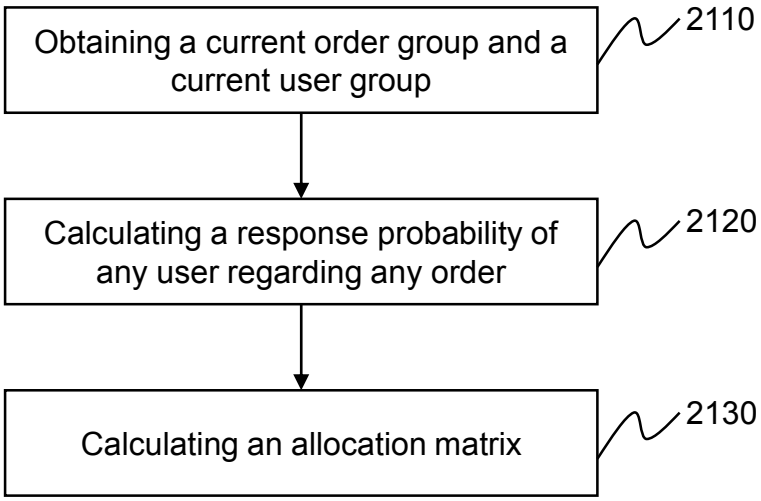

Obtaining a current order group and a current user group
2110
Calculating a response probability of any user regarding any order
2120
Calculating an allocation matrix
2130

FIG. 21

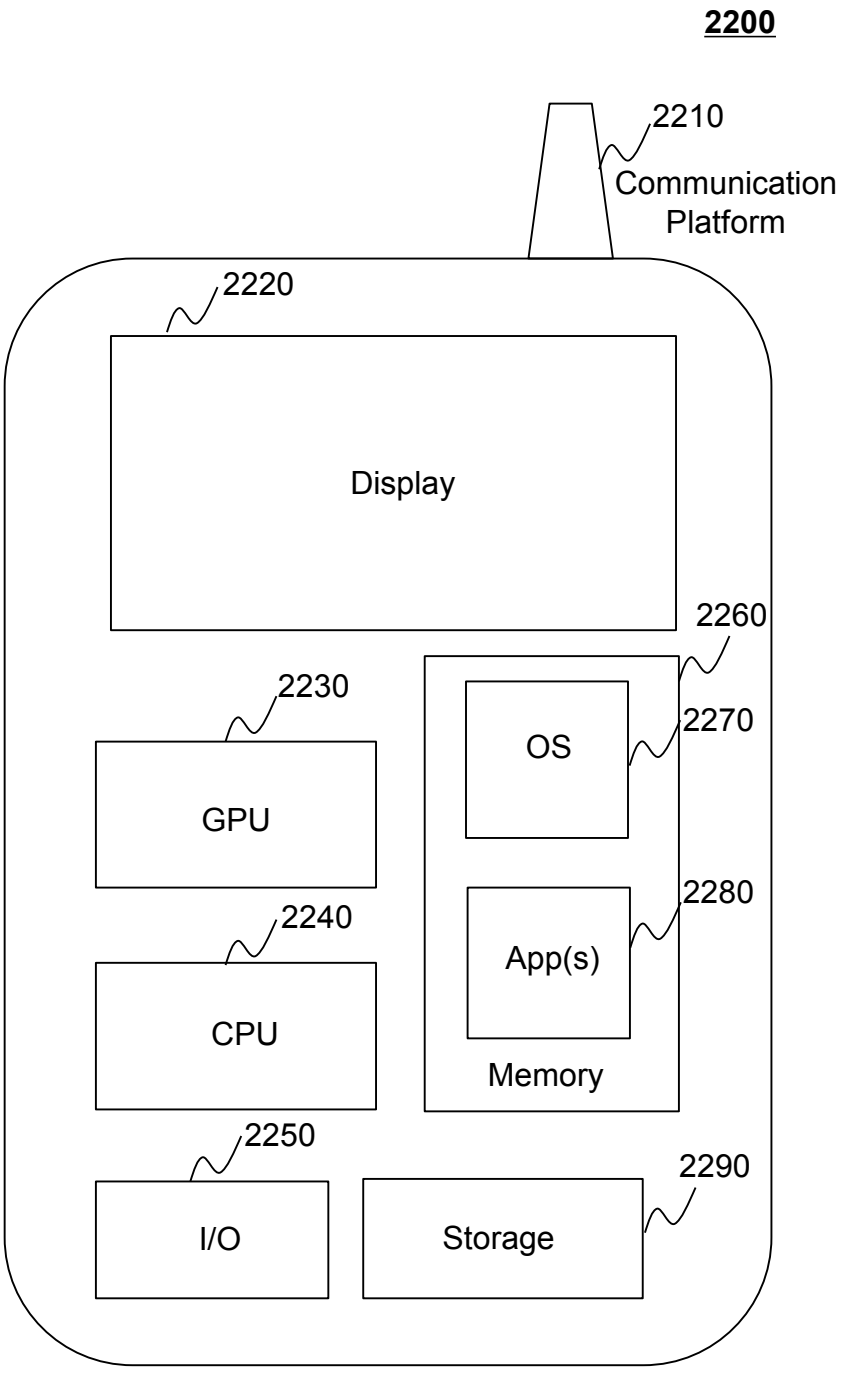

2200
2210
Communication Platform
2220
Display
2260
2230
OS
2270
GPU
2280
2240
App(s)
CPU
Memory
2250
2290
I/O
Storage

FIG. 22

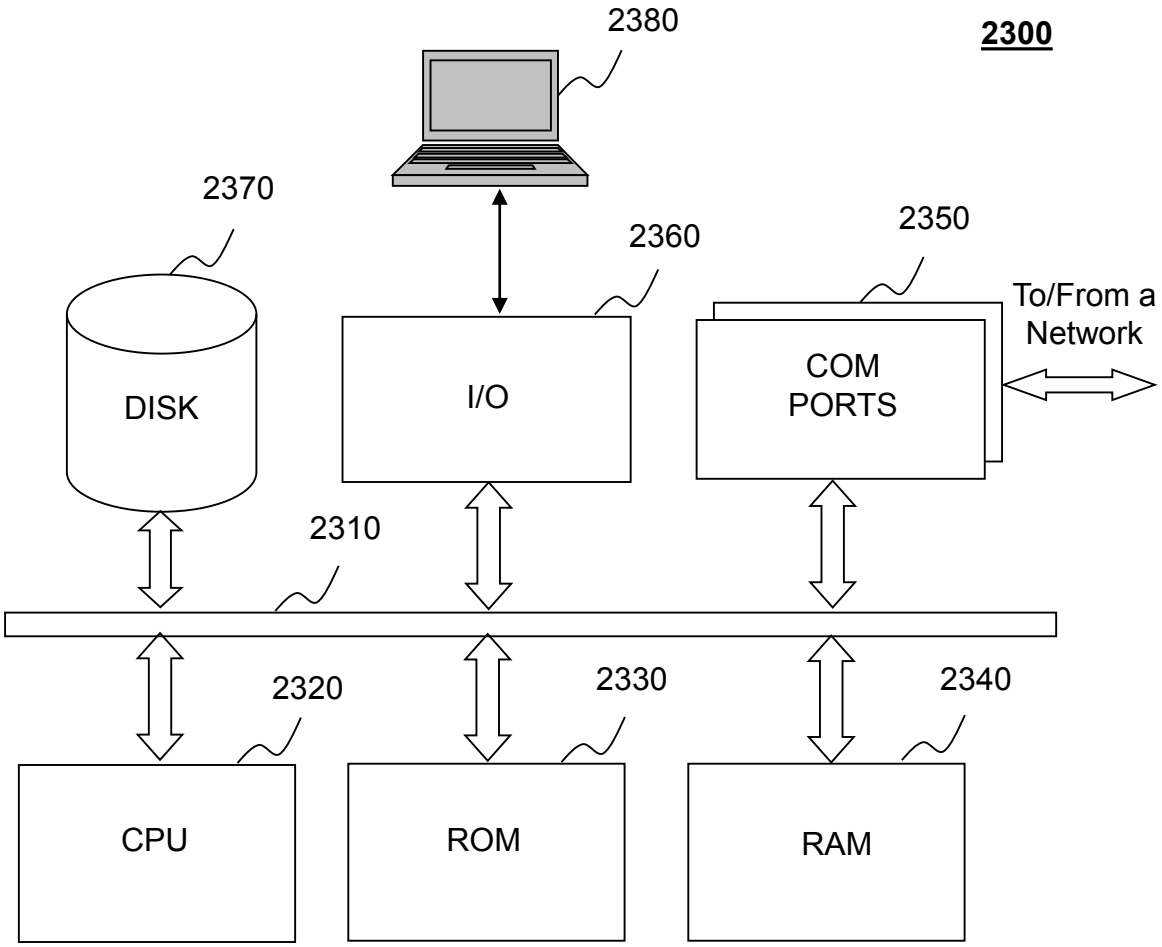

2380
2300
2370
2360
2350
To/From a
Network
DISK
I/O
COM
PORTS
2310
2320
2330
2340
CPU
ROM
RAM

FIG. 23