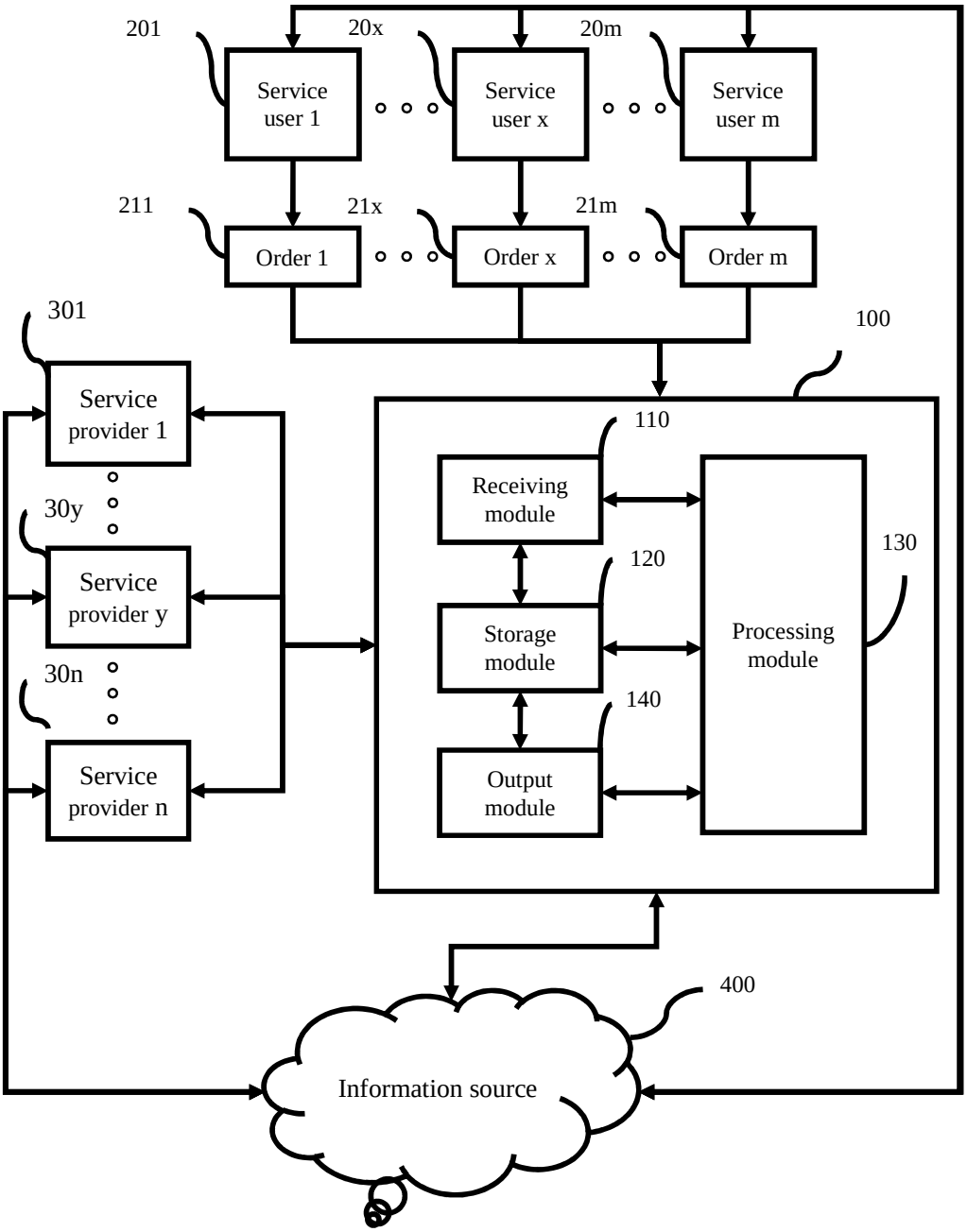

201
20x
20m
Service user 1
Service user x
Service user m
211
21x
21m
Order 1
Order x
Order m
301
100
Service provider 1
30y
Service provider y
30n
Service provider n
110
Receiving module
120
Storage module
140
Output module
130
Processing module
400
Information source

FIG. 1

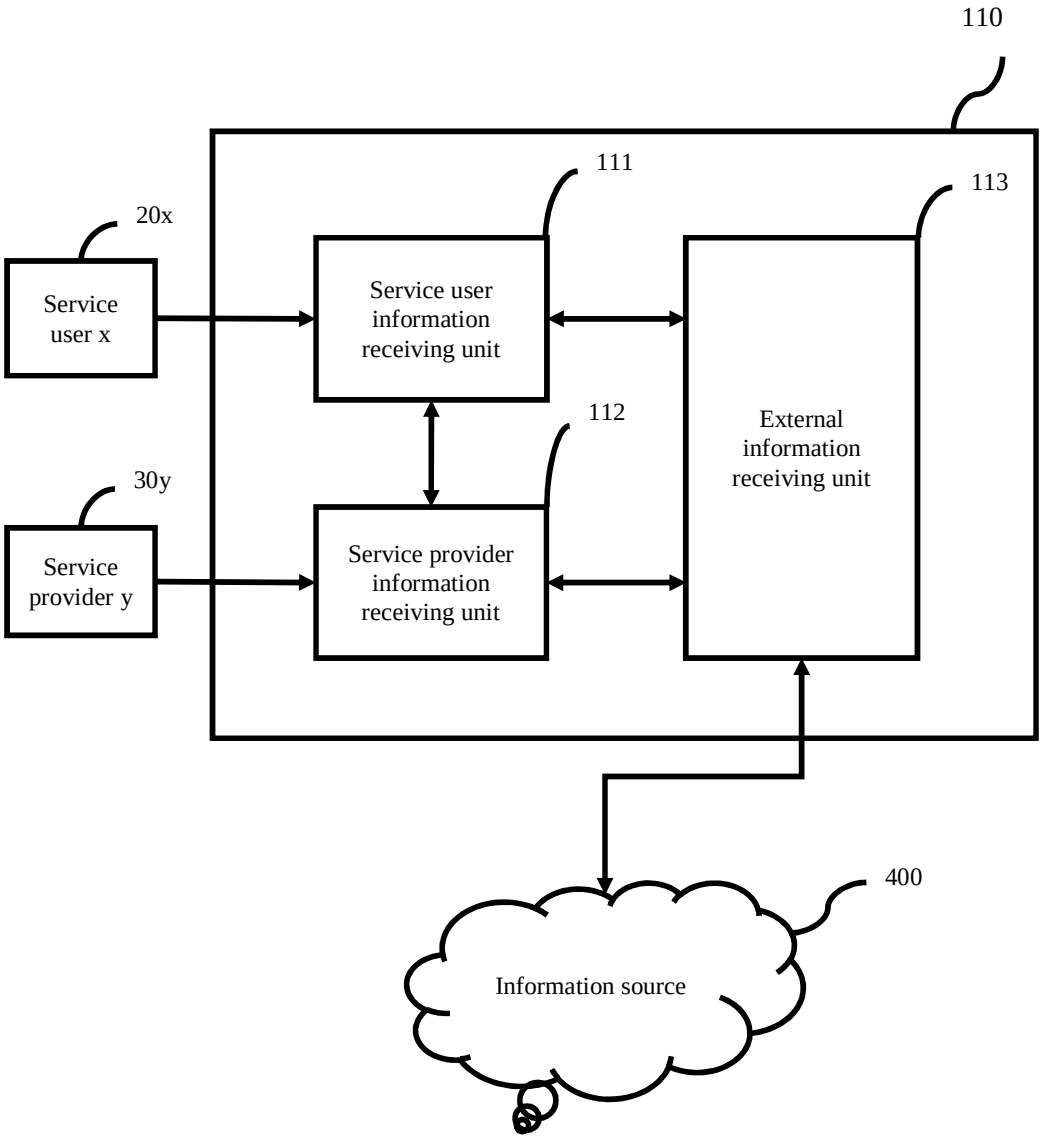

110
111
113
20x
Service user x
Service user information receiving unit
112
External information receiving unit
30y
Service provider y
Service provider information receiving unit
400
Information source

FIG. 2

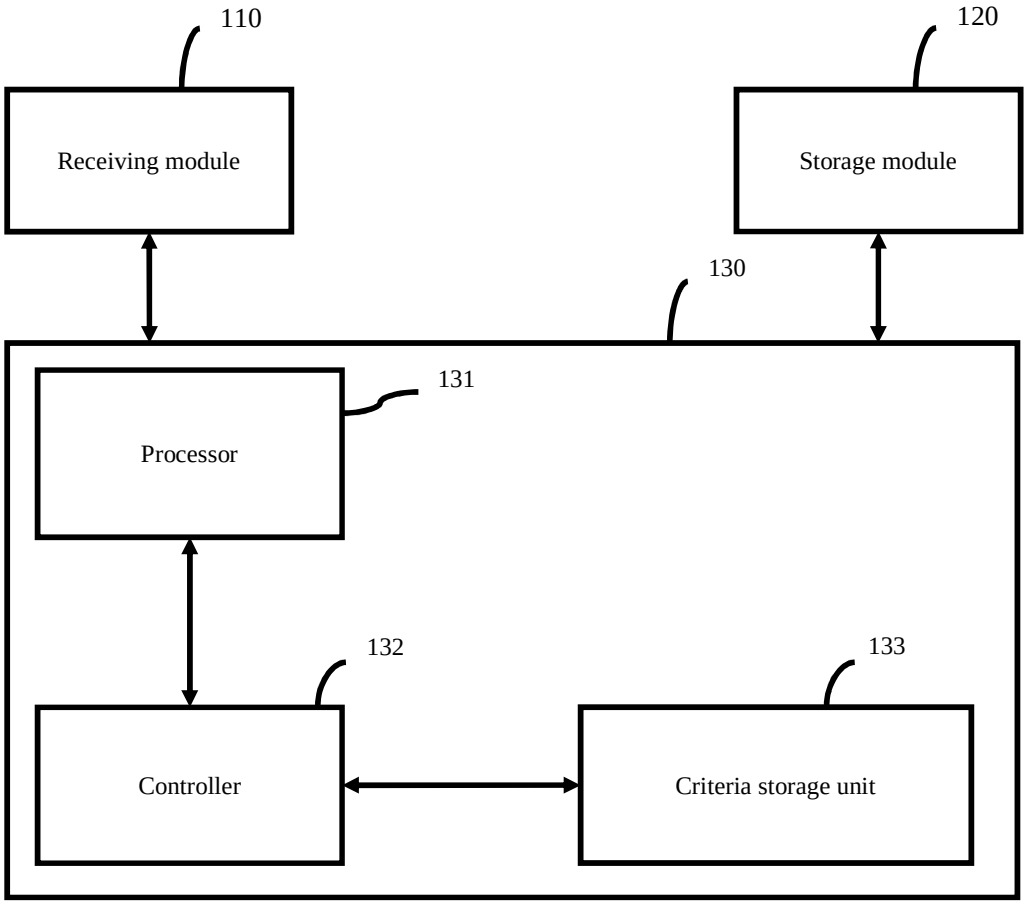

110
120
Receiving module
Storage module
130
131
Processor
132
133
Controller
Criteria storage unit

FIG. 3

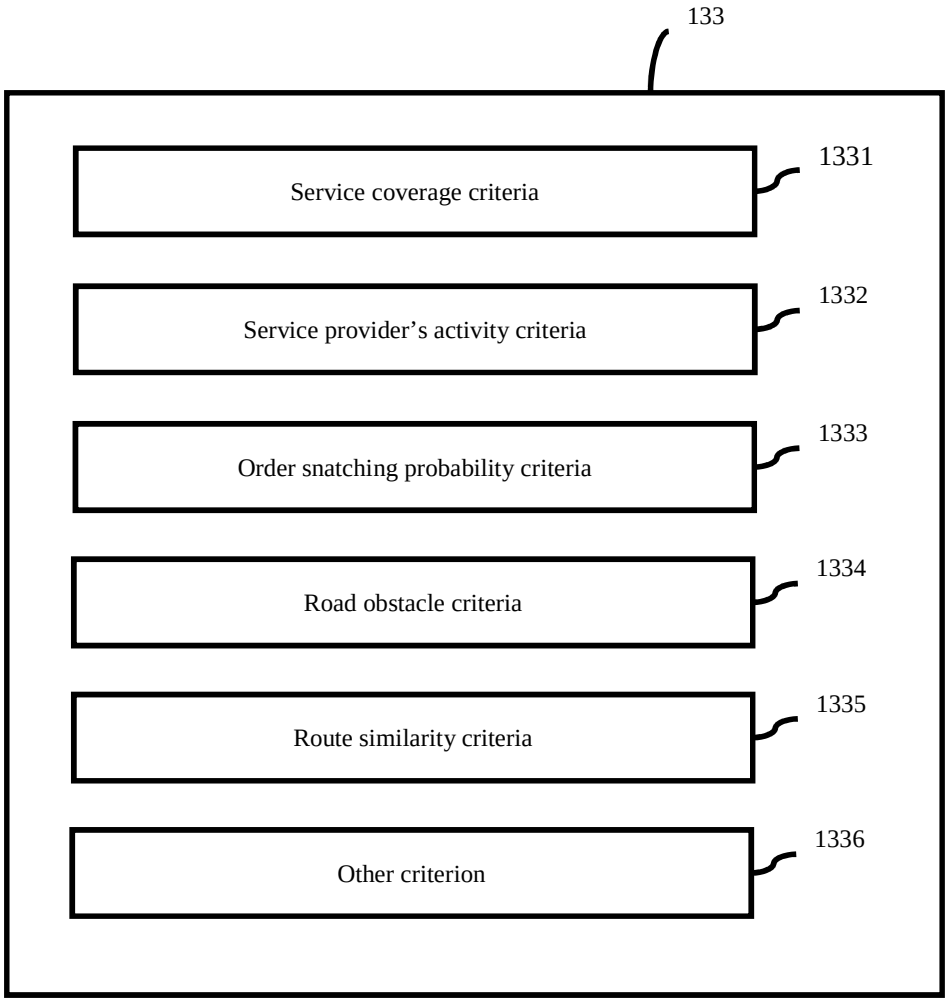

133
Service coverage criteria
1331
Service provider’s activity criteria
1332
Order snatching probability criteria
1333
Road obstacle criteria
1334
Route similarity criteria
1335
Other criterion
1336

FIG. 4

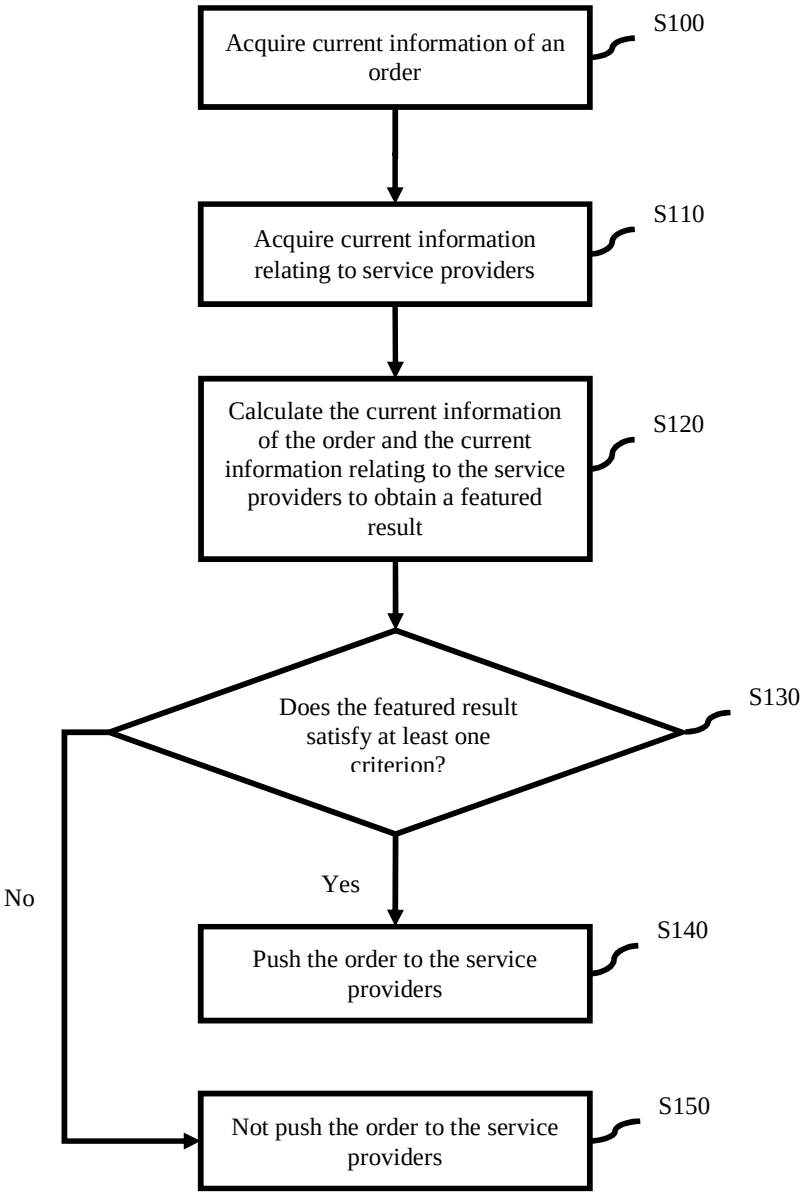

Acquire current information of an order
S100
Acquire current information relating to service providers
S110
Calculate the current information of the order and the current information relating to the service providers to obtain a featured result
S120
Does the featured result satisfy at least one criterion?
S130
Yes
No
Push the order to the service providers
S140
Not push the order to the service providers
S150

FIG. 5a

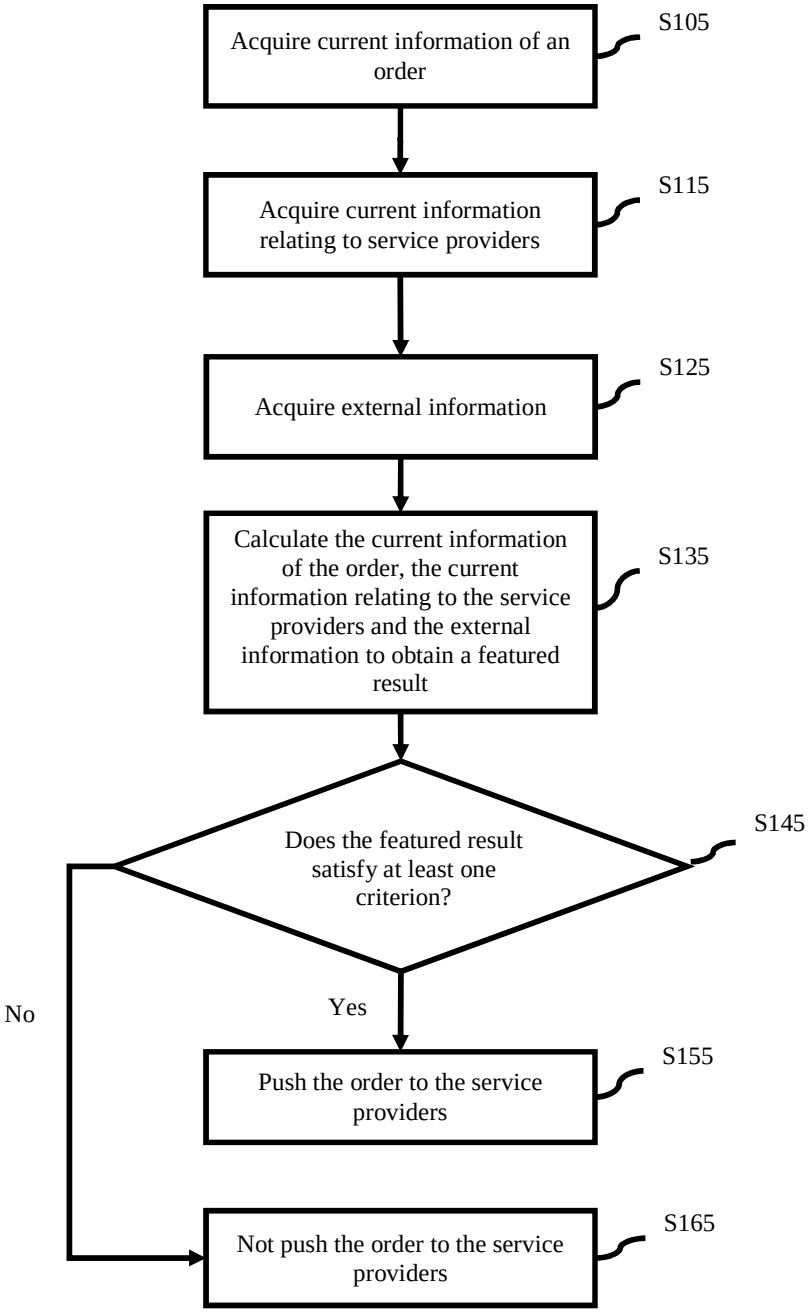

Acquire current information of an order
S105
Acquire current information relating to service providers
S115
Acquire external information
S125
Calculate the current information of the order, the current information relating to the service providers and the external information to obtain a featured result
S135
Does the featured result satisfy at least one criterion?
S145
Yes
No
Push the order to the service providers
S155
Not push the order to the service providers
S165

FIG. 5b

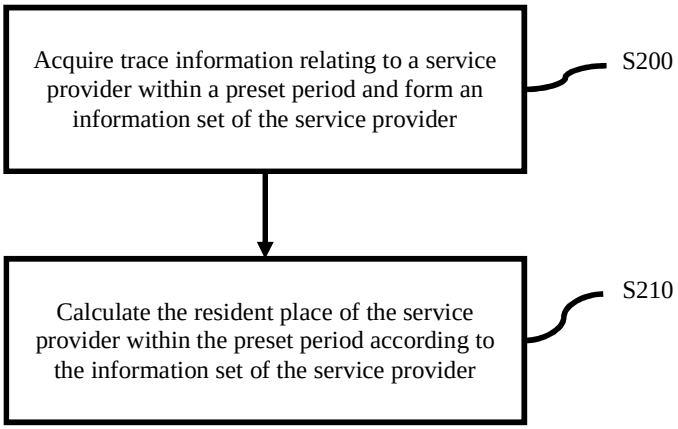

Acquire trace information relating to a service provider within a preset period and form an information set of the service provider
S200
Calculate the resident place of the service provider within the preset period according to the information set of the service provider
S210

FIG. 6

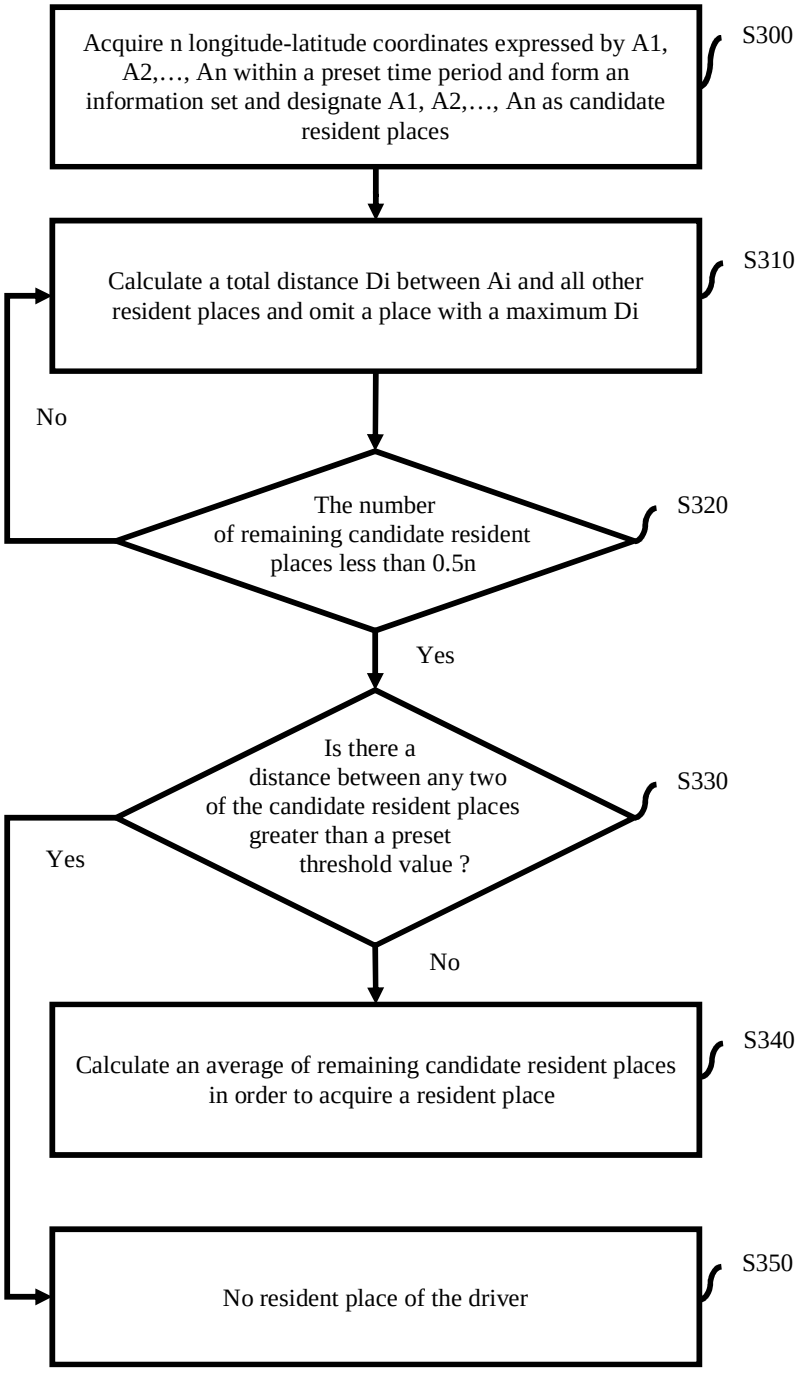

Acquire n longitude-latitude coordinates expressed by A1, A2,…, An within a preset time period and form an information set and designate A1, A2,…, An as candidate resident places
S300
Calculate a total distance Di between Ai and all other resident places and omit a place with a maximum Di
S310
No
The number of remaining candidate resident places less than 0.5n
S320
Yes
Is there a distance between any two of the candidate resident places greater than a preset threshold value ?
S330
Yes
No
Calculate an average of remaining candidate resident places in order to acquire a resident place
S340
No resident place of the driver
S350

FIG. 7

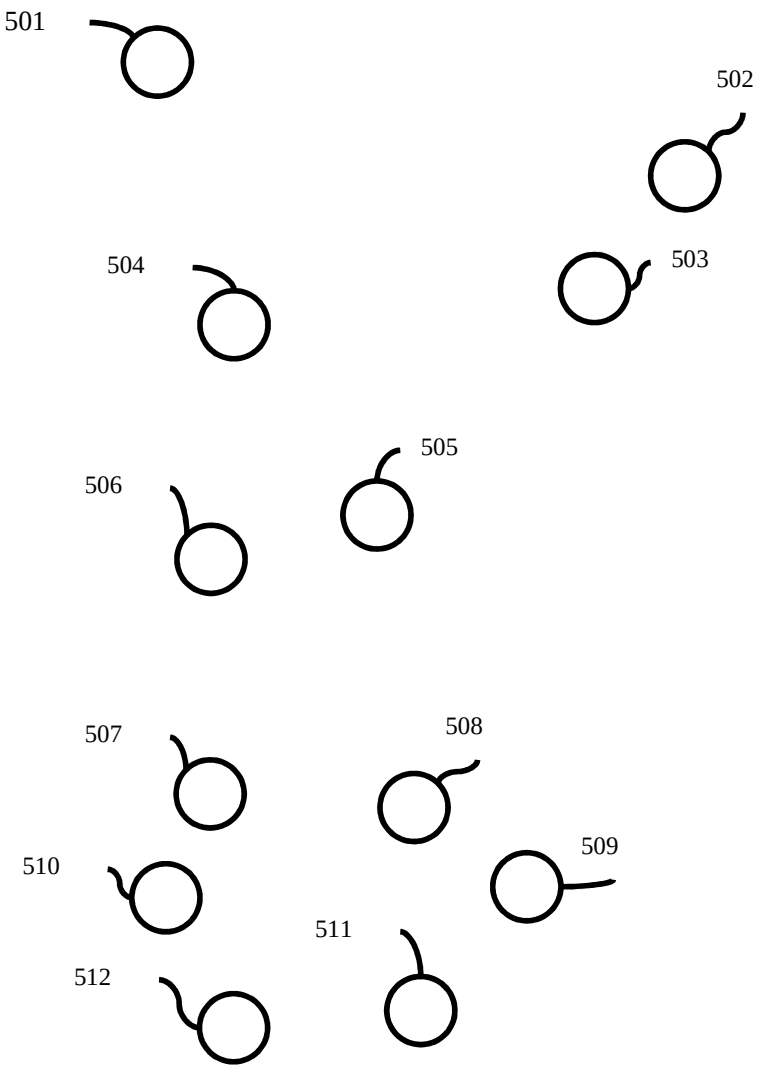


FIG. 8

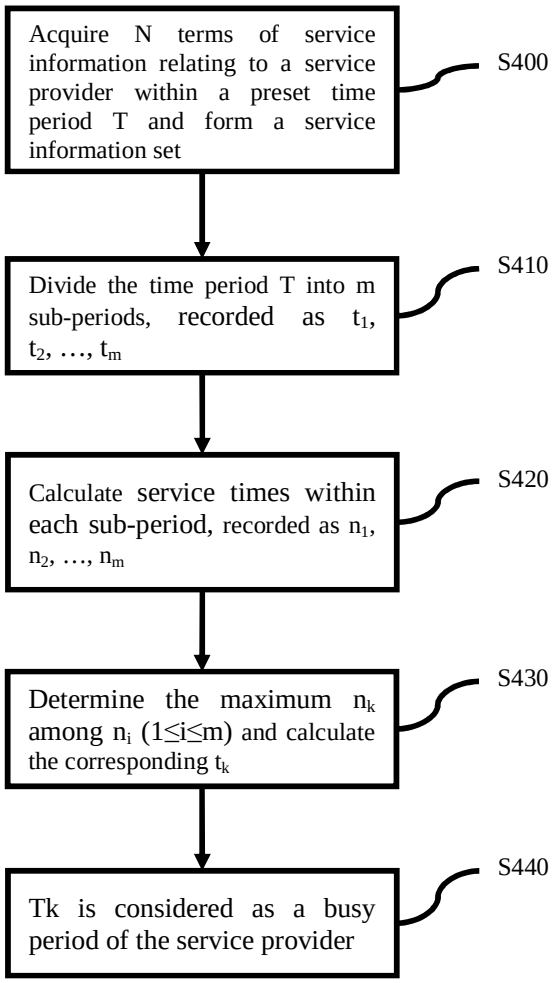

Acquire N terms of service information relating to a service provider within a preset time period T and form a service information set
S400
Divide the time period T into m sub-periods, recorded as t_1, t_2, …, t_m
S410
Calculate service times within each sub-period, recorded as n_1, n_2, …, n_m
S420
Determine the maximum n_k among n_i ($1 \leq i \leq m$) and calculate the corresponding t_k
S430
Tk is considered as a busy period of the service provider
S440

FIG. 9

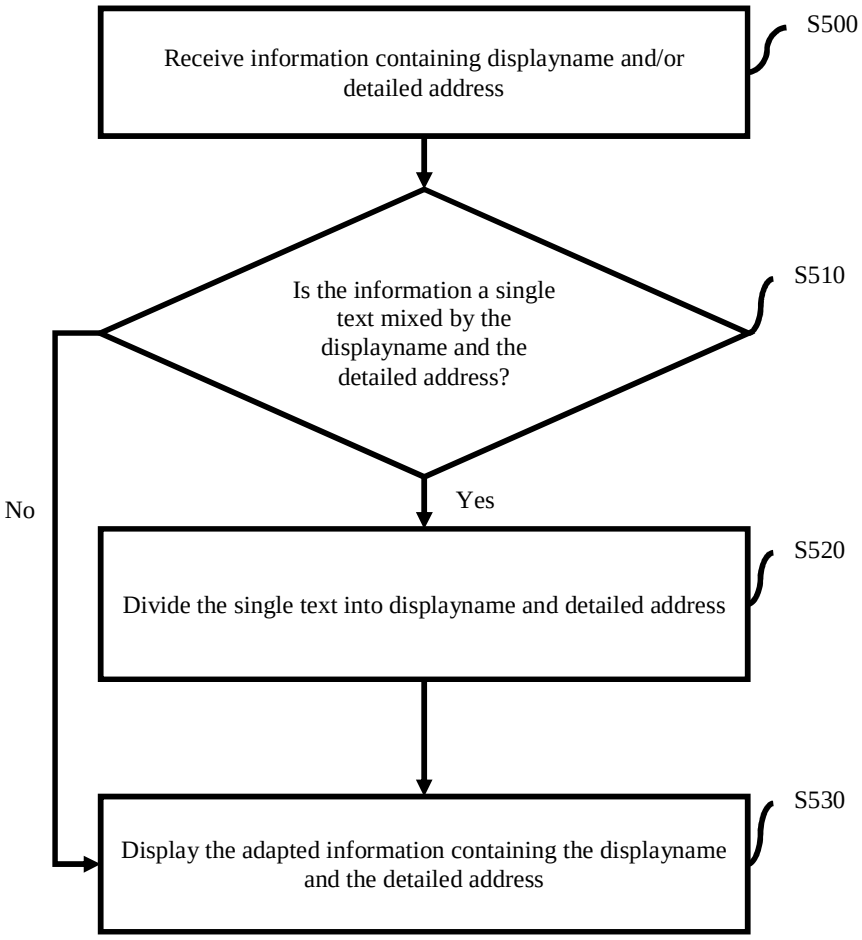

Receive information containing displayname and/or detailed address
S500
Is the information a single text mixed by the displayname and the detailed address?
S510
Yes
No
Divide the single text into displayname and detailed address
S520
Display the adapted information containing the displayname and the detailed address
S530

FIG. 10

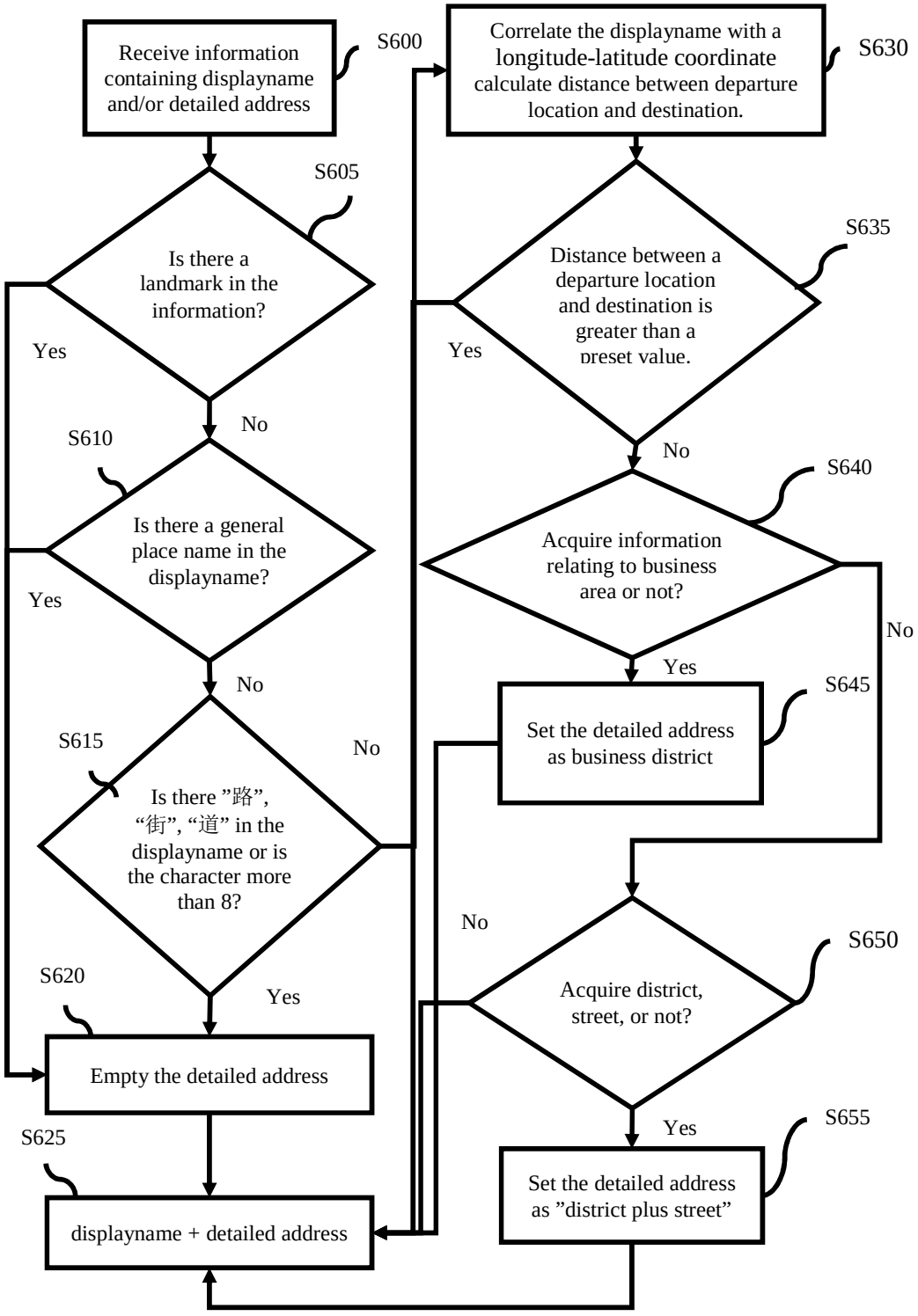

Receive information containing displayname and/or detailed address
S600
Correlate the displayname with a longitude-latitude coordinate calculate distance between departure location and destination.
S630
S605
Is there a landmark in the information?
Yes
No
S635
Distance between a departure location and destination is greater than a preset value.
Yes
No
S610
Is there a general place name in the displayname?
Yes
No
S640
Acquire information relating to business area or not?
No
Yes
S645
Set the detailed address as business district
S615
Is there ”路”, “街”, “道” in the displayname or is the character more than 8?
No
Yes
No
S650
Acquire district, street, or not?
S620
Empty the detailed address
Yes
S655
Set the detailed address as ”district plus street”
S625
displayname + detailed address

FIG. 11

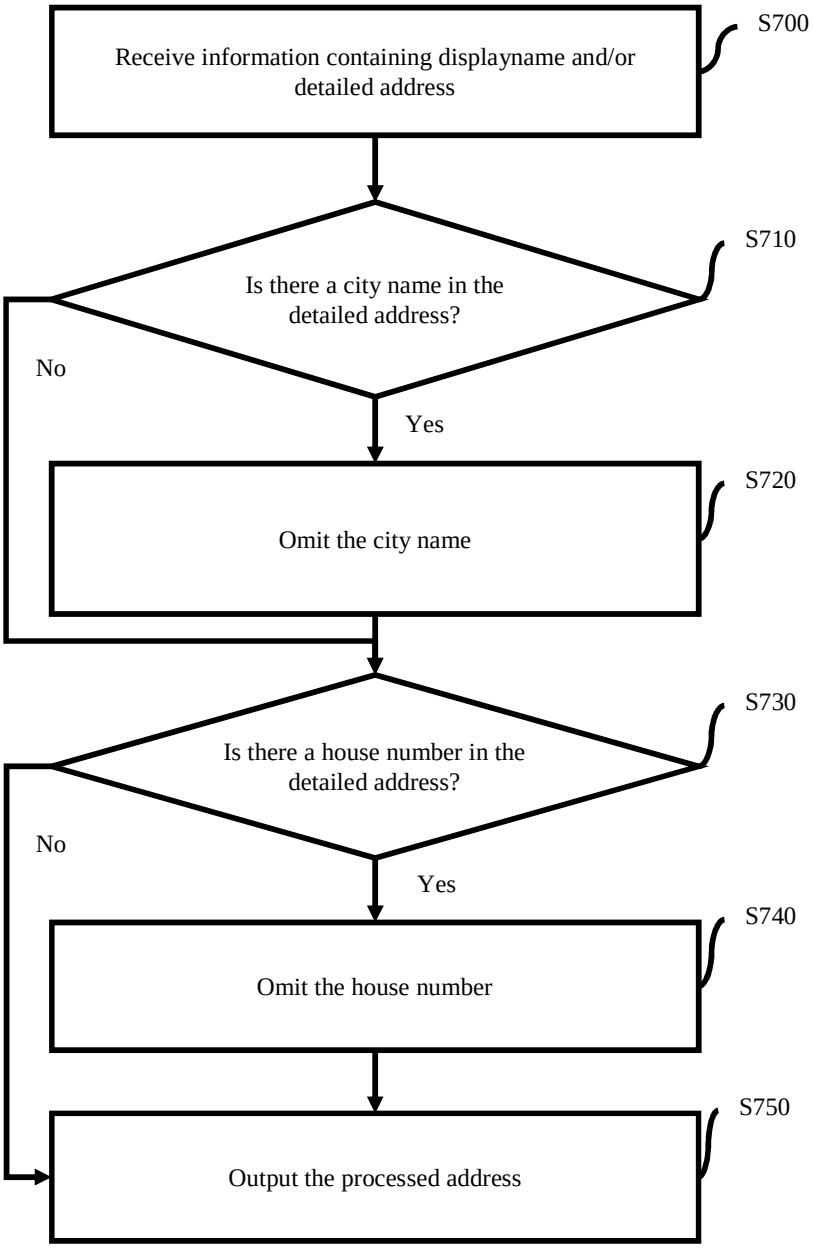

Receive information containing displayname and/or detailed address
S700
Is there a city name in the detailed address?
S710
No
Yes
Omit the city name
S720
Is there a house number in the detailed address?
S730
No
Yes
Omit the house number
S740
Output the processed address
S750

FIG. 12

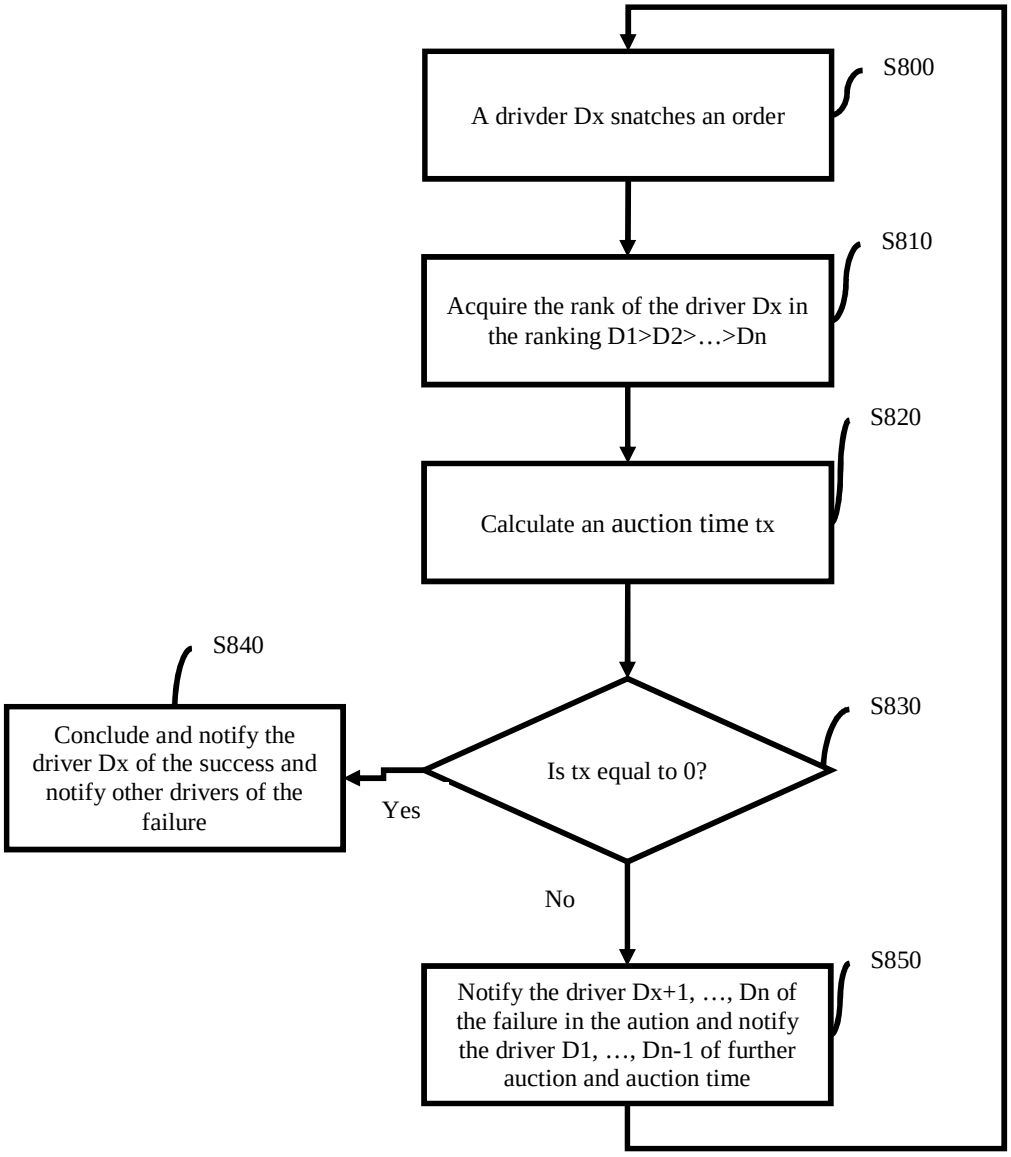

A drivder Dx snatches an order
S800
Acquire the rank of the driver Dx in the ranking D1>D2>…>Dn
S810
Calculate an auction time tx
S820
Is tx equal to 0?
S830
Yes
Conclude and notify the driver Dx of the success and notify other drivers of the failure
S840
No
Notify the driver Dx+1, …, Dn of the failure in the aution and notify the driver D1, …, Dn-1 of further auction and auction time
S850

FIG. 13

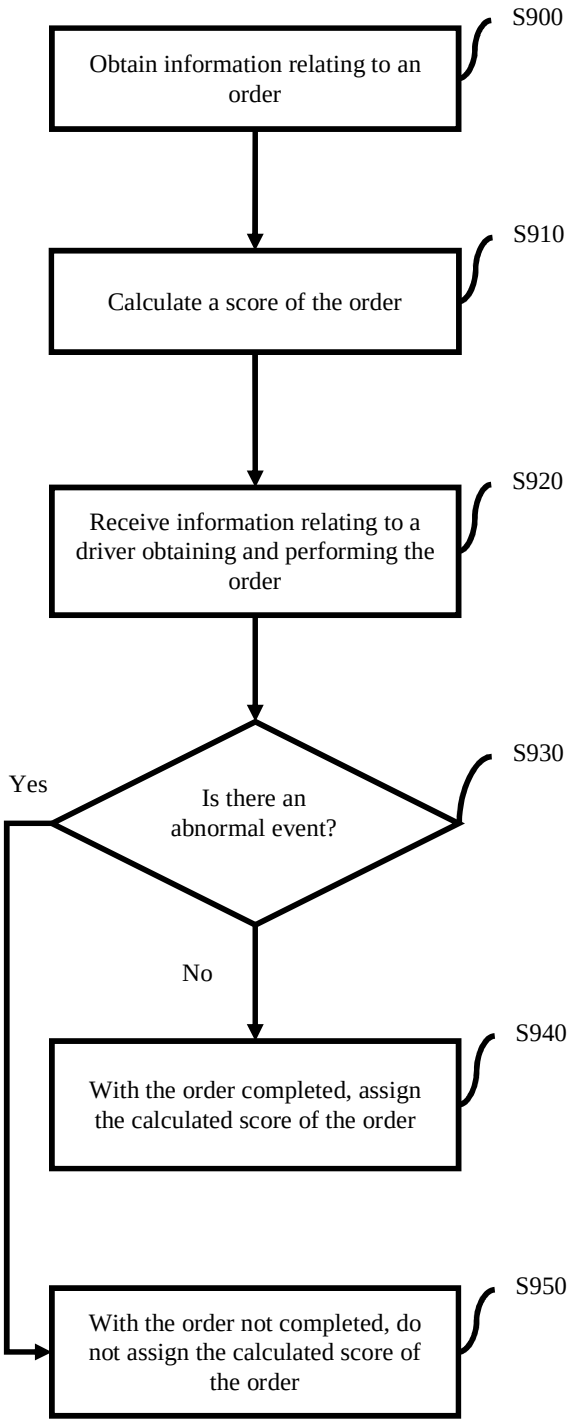

S900
Obtain information relating to an order
S910
Calculate a score of the order
S920
Receive information relating to a driver obtaining and performing the order
S930
Is there an abnormal event?
Yes
No
S940
With the order completed, assign the calculated score of the order
S950
With the order not completed, do not assign the calculated score of the order

FIG. 14

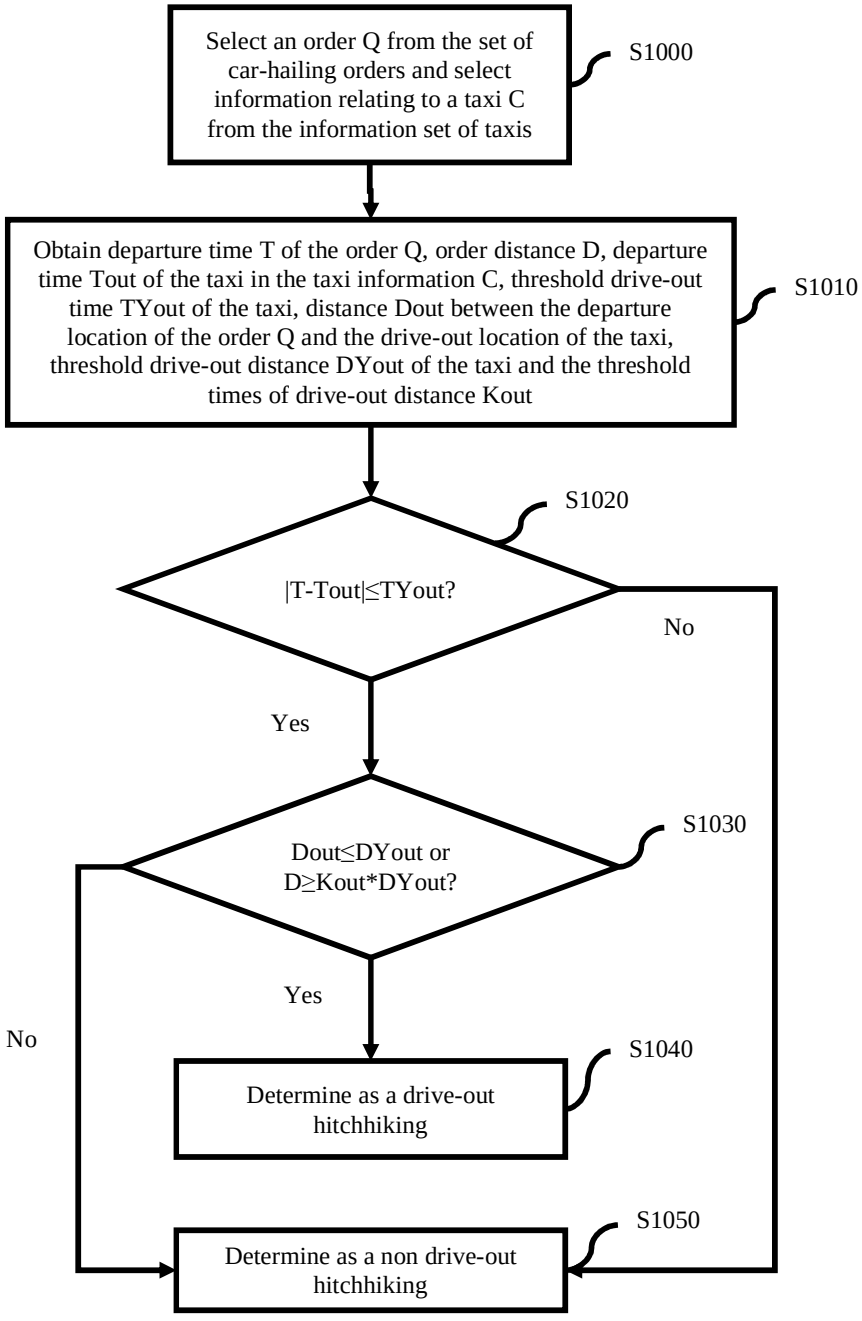

Select an order Q from the set of car-hailing orders and select information relating to a taxi C from the information set of taxis
S1000
Obtain departure time T of the order Q, order distance D, departure time Tout of the taxi in the taxi information C, threshold drive-out time TYout of the taxi, distance Dout between the departure location of the order Q and the drive-out location of the taxi, threshold drive-out distance DYout of the taxi and the threshold times of drive-out distance Kout
S1010
S1020
|T-Tout|≤TYout?
No
Yes
S1030
Dout≤DYout or D≥Kout*DYout?
Yes
No
S1040
Determine as a drive-out hitchhiking
S1050
Determine as a non drive-out hitchhiking

FIG. 15

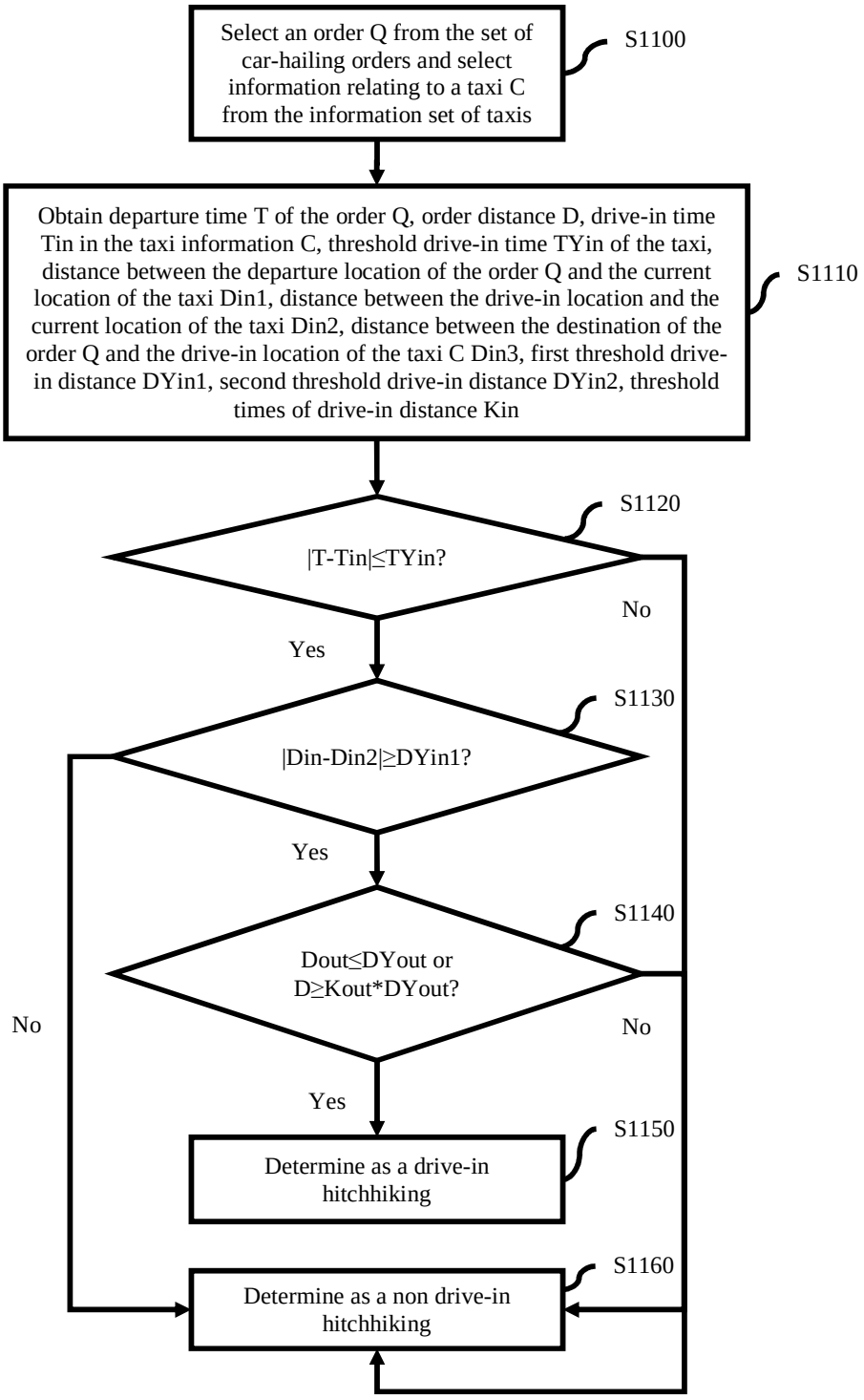

Select an order Q from the set of car-hailing orders and select information relating to a taxi C from the information set of taxis
S1100
Obtain departure time T of the order Q, order distance D, drive-in time Tin in the taxi information C, threshold drive-in time TYin of the taxi, distance between the departure location of the order Q and the current location of the taxi Din1, distance between the drive-in location and the current location of the taxi Din2, distance between the destination of the order Q and the drive-in location of the taxi C Din3, first threshold drive-in distance DYin1, second threshold drive-in distance DYin2, threshold times of drive-in distance Kin
S1110
S1120
|T-Tin|≤TYin?
No
Yes
S1130
|Din-Din2|≥DYin1?
Yes
S1140
Dout≤DYout or D≥Kout*DYout?
No
No
Yes
S1150
Determine as a drive-in hitchhiking
S1160
Determine as a non drive-in hitchhiking

FIG. 16

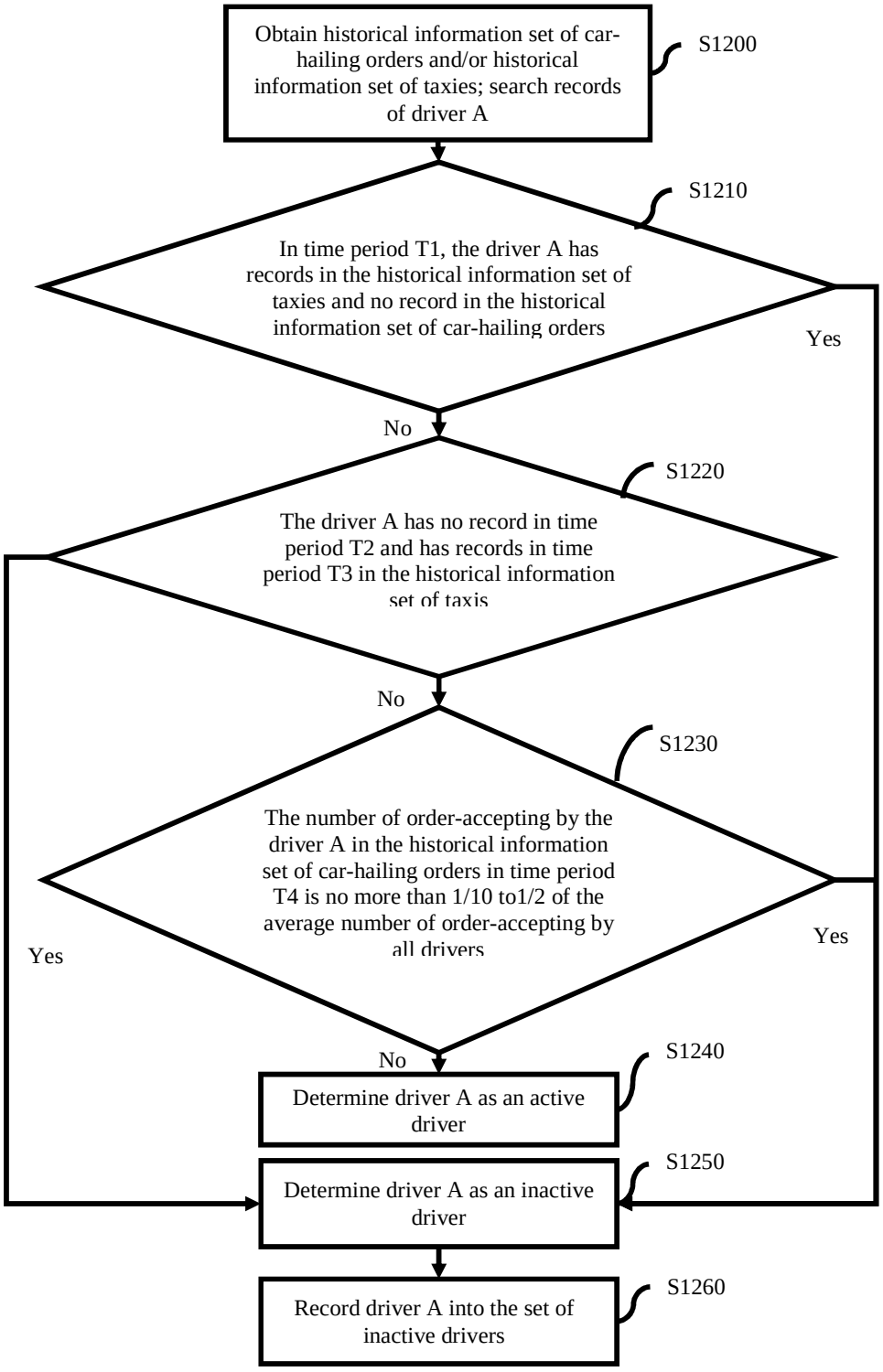

Obtain historical information set of car-hailing orders and/or historical information set of taxies; search records of driver A
S1200
S1210
In time period T1, the driver A has records in the historical information set of taxies and no record in the historical information set of car-hailing orders
Yes
No
S1220
The driver A has no record in time period T2 and has records in time period T3 in the historical information set of taxis
No
S1230
The number of order-accepting by the driver A in the historical information set of car-hailing orders in time period T4 is no more than 1/10 to1/2 of the average number of order-accepting by all drivers
Yes
Yes
No
S1240
Determine driver A as an active driver
S1250
Determine driver A as an inactive driver
S1260
Record driver A into the set of inactive drivers

FIG. 17a

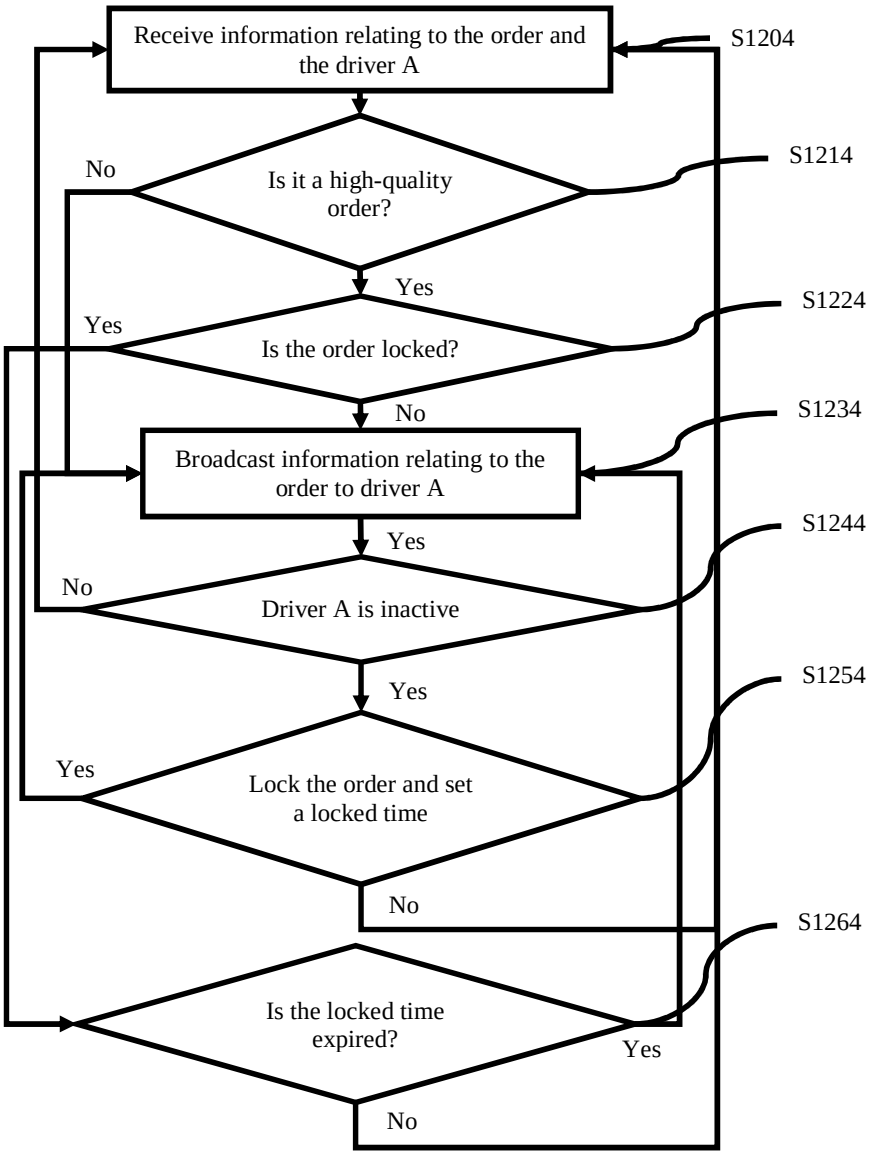

Receive information relating to the order and the driver A
S1204
Is it a high-quality order?
S1214
No
Yes
Is the order locked?
S1224
Yes
No
Broadcast information relating to the order to driver A
S1234
Yes
Driver A is inactive
S1244
No
Yes
Lock the order and set a locked time
S1254
Yes
No
Is the locked time expired?
S1264
Yes
No

FIG. 17b

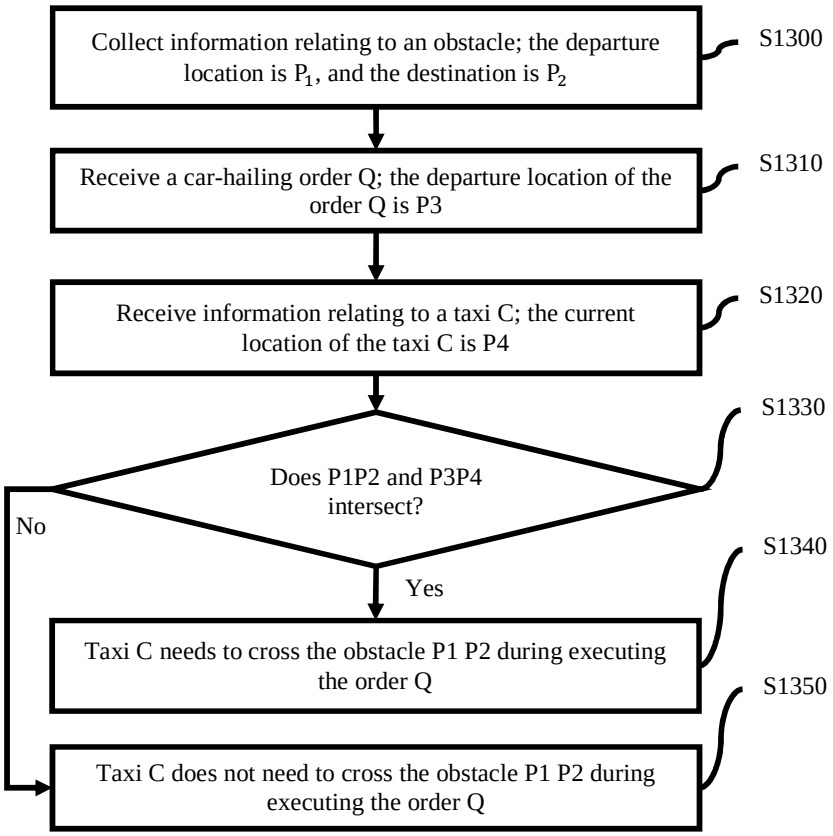

Collect information relating to an obstacle; the departure location is P_1, and the destination is P_2
S1300
Receive a car-hailing order Q; the departure location of the order Q is P3
S1310
Receive information relating to a taxi C; the current location of the taxi C is P4
S1320
Does P1P2 and P3P4 intersect?
S1330
No
Yes
Taxi C needs to cross the obstacle P1 P2 during executing the order Q
S1340
Taxi C does not need to cross the obstacle P1 P2 during executing the order Q
S1350

FIG. 18

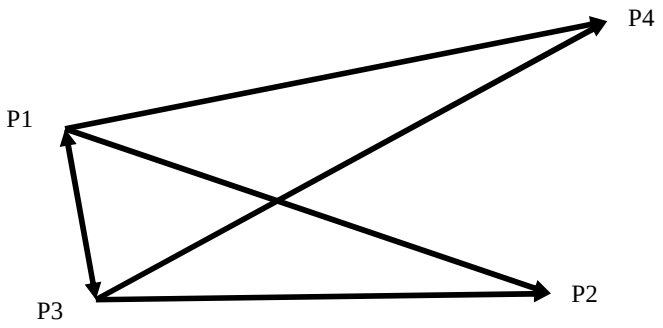


FIG. 19

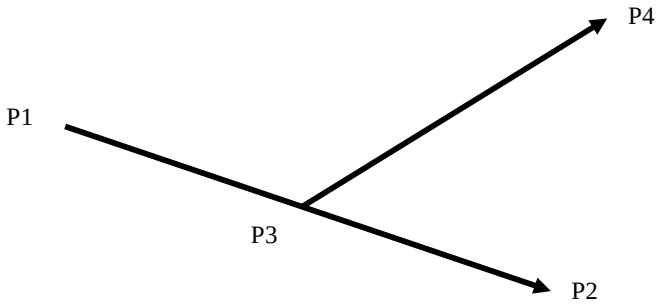


FIG. 20

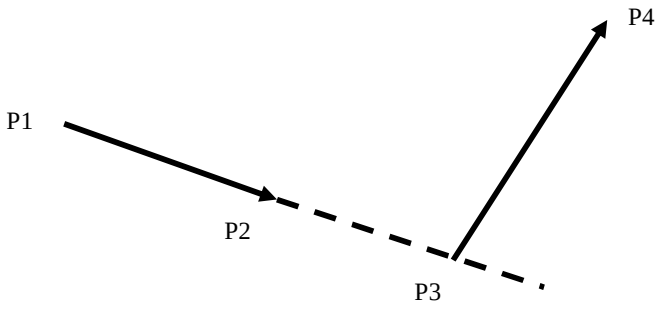


FIG. 21

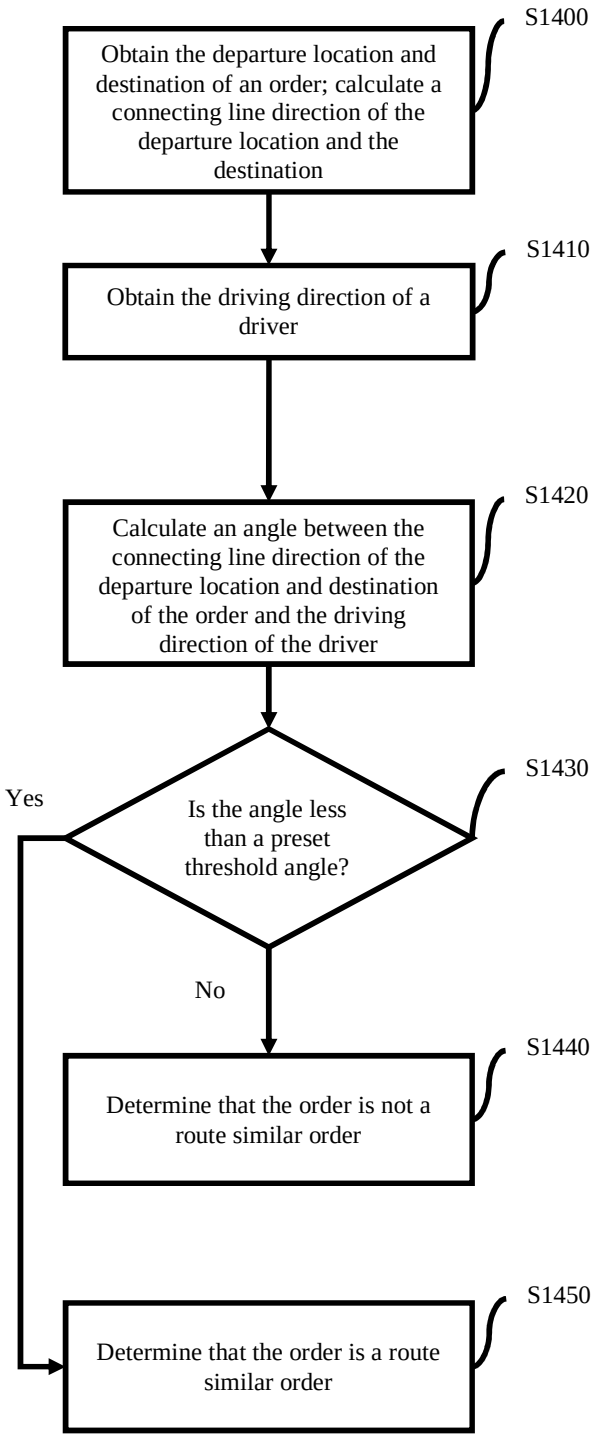

S1400
Obtain the departure location and destination of an order; calculate a connecting line direction of the departure location and the destination
S1410
Obtain the driving direction of a driver
S1420
Calculate an angle between the connecting line direction of the departure location and destination of the order and the driving direction of the driver
S1430
Is the angle less than a preset threshold angle?
Yes
No
S1440
Determine that the order is not a route similar order
S1450
Determine that the order is a route similar order

FIG. 22

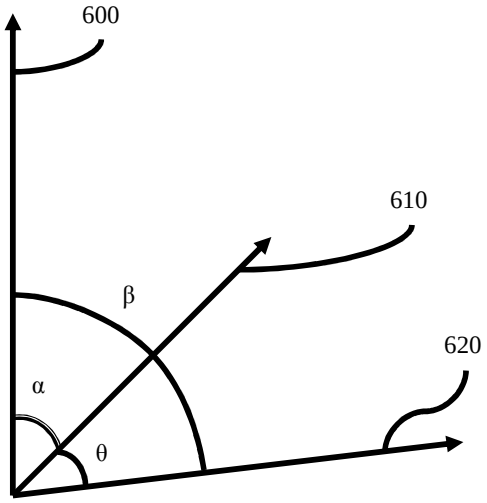


FIG. 23

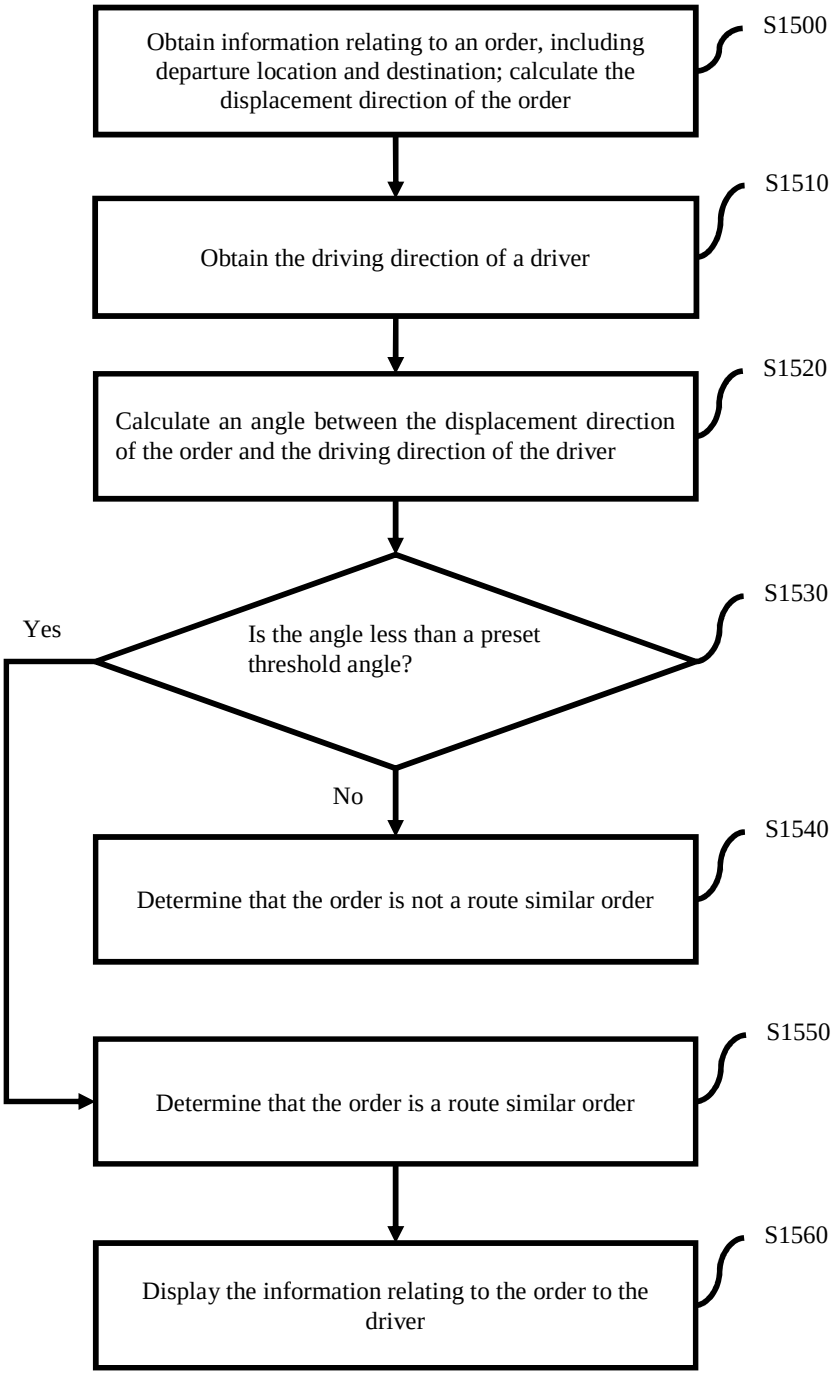

Obtain information relating to an order, including departure location and destination; calculate the displacement direction of the order
S1500
Obtain the driving direction of a driver
S1510
Calculate an angle between the displacement direction of the order and the driving direction of the driver
S1520
Is the angle less than a preset threshold angle?
S1530
Yes
No
Determine that the order is not a route similar order
S1540
Determine that the order is a route similar order
S1550
Display the information relating to the order to the driver
S1560

FIG. 24

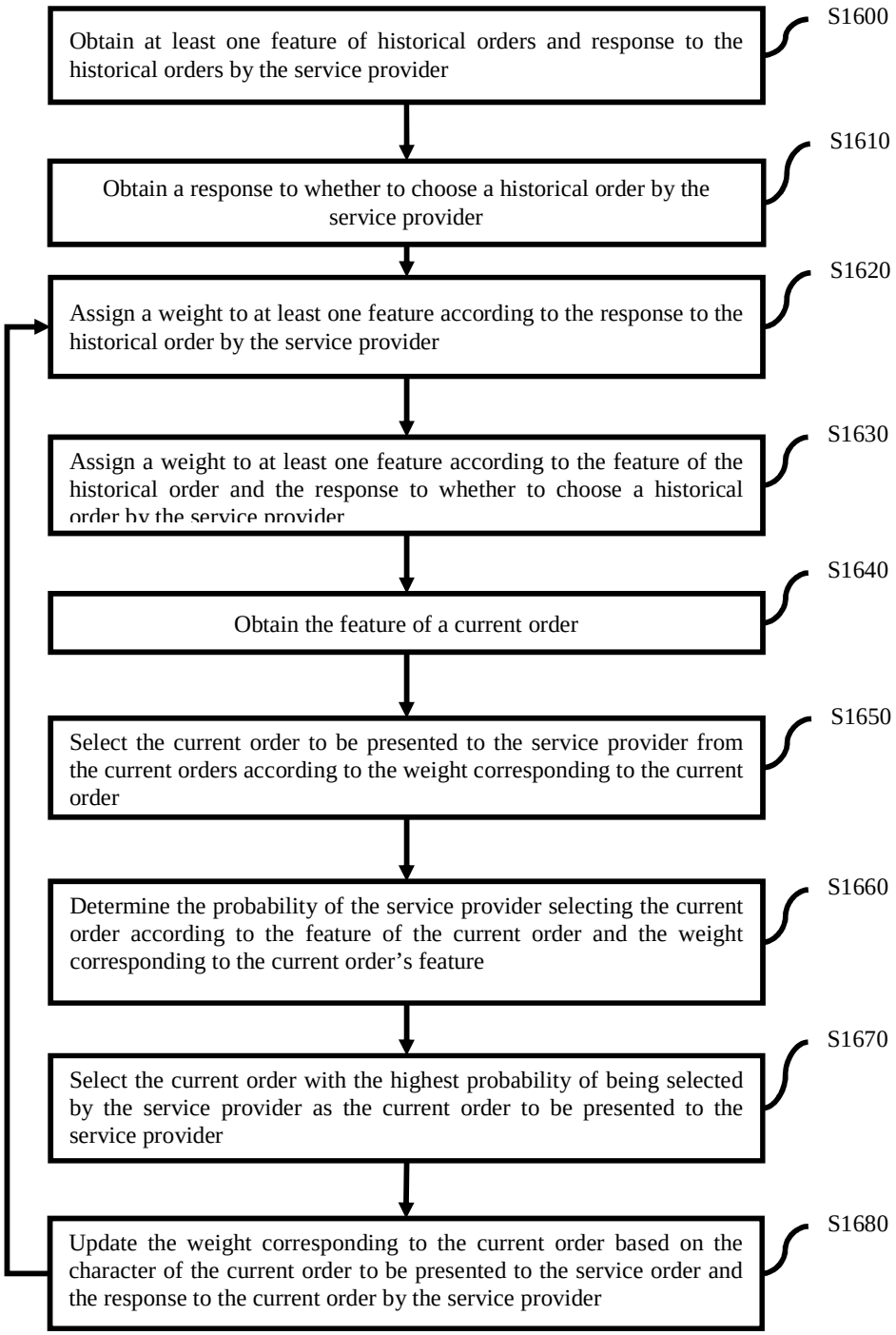

Obtain at least one feature of historical orders and response to the historical orders by the service provider
S1600
Obtain a response to whether to choose a historical order by the service provider
S1610
Assign a weight to at least one feature according to the response to the historical order by the service provider
S1620
Assign a weight to at least one feature according to the feature of the historical order and the response to whether to choose a historical order by the service provider
S1630
Obtain the feature of a current order
S1640
Select the current order to be presented to the service provider from the current orders according to the weight corresponding to the current order
S1650
Determine the probability of the service provider selecting the current order according to the feature of the current order and the weight corresponding to the current order's feature
S1660
Select the current order with the highest probability of being selected by the service provider as the current order to be presented to the service provider
S1670
Update the weight corresponding to the current order based on the character of the current order to be presented to the service order and the response to the current order by the service provider
S1680

FIG. 25

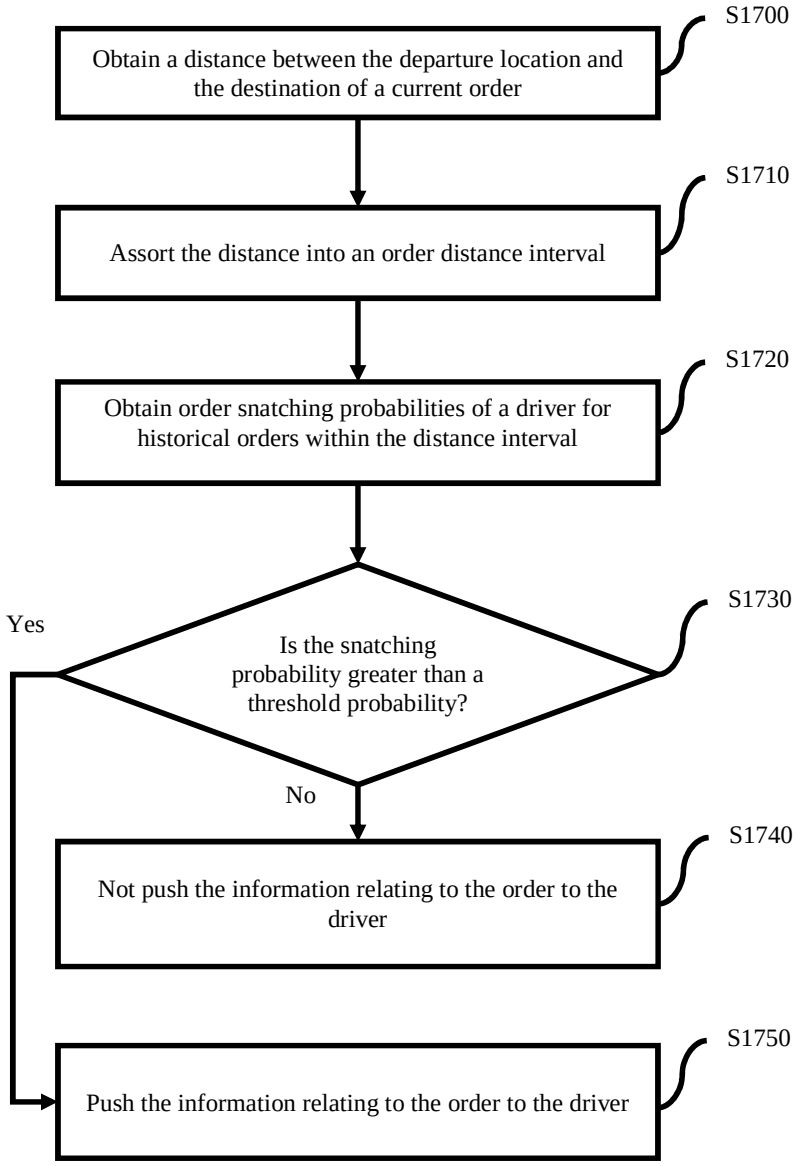

S1700
Obtain a distance between the departure location and the destination of a current order
S1710
Assort the distance into an order distance interval
S1720
Obtain order snatching probabilities of a driver for historical orders within the distance interval
S1730
Is the snatching probability greater than a threshold probability?
Yes
No
S1740
Not push the information relating to the order to the driver
S1750
Push the information relating to the order to the driver

FIG. 26

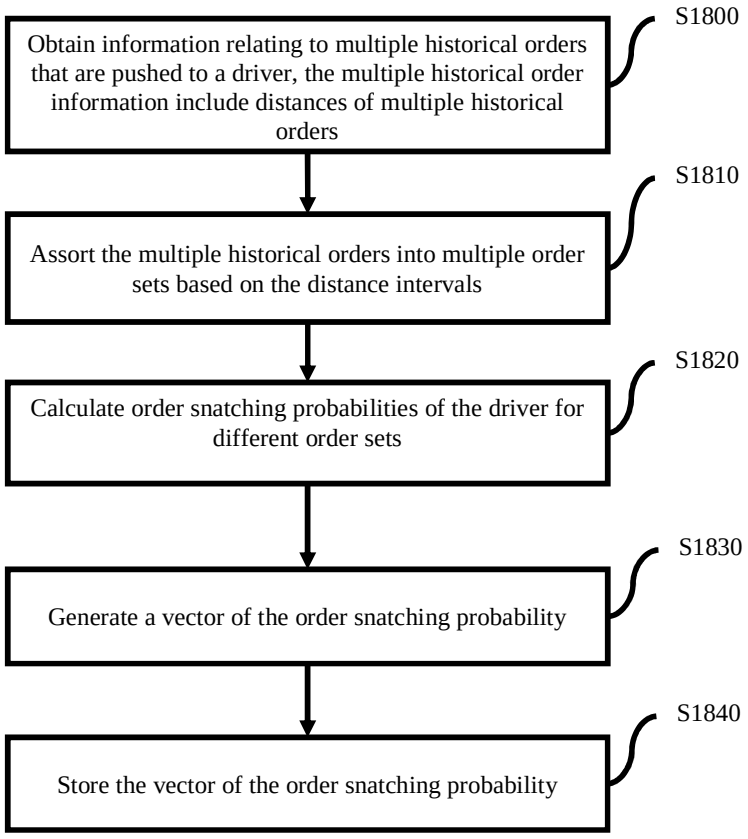

S1800
Obtain information relating to multiple historical orders that are pushed to a driver, the multiple historical order information include distances of multiple historical orders
S1810
Assort the multiple historical orders into multiple order sets based on the distance intervals
S1820
Calculate order snatching probabilities of the driver for different order sets
S1830
Generate a vector of the order snatching probability
S1840
Store the vector of the order snatching probability

FIG. 27

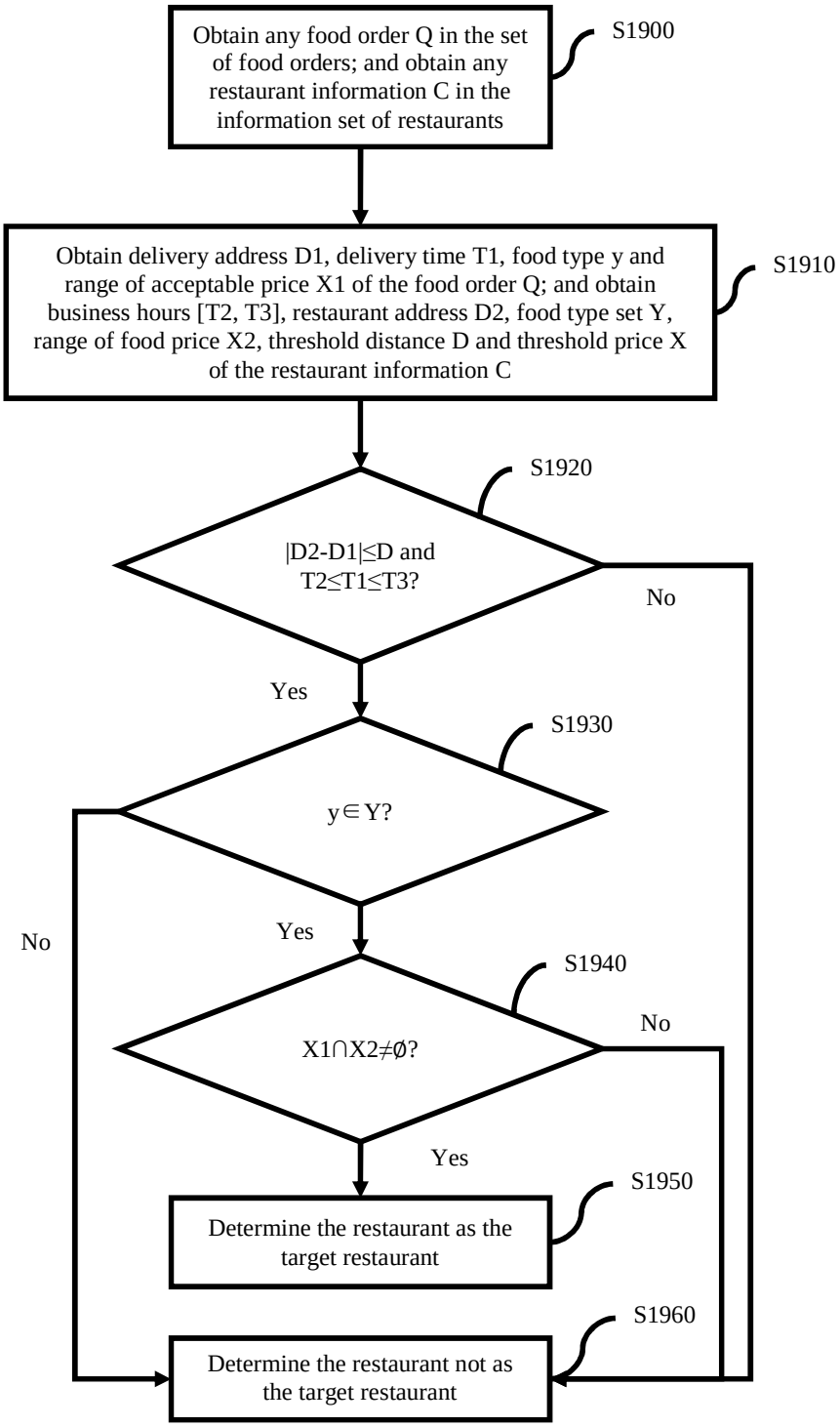

Obtain any food order Q in the set of food orders; and obtain any restaurant information C in the information set of restaurants
S1900
Obtain delivery address D1, delivery time T1, food type y and range of acceptable price X1 of the food order Q; and obtain business hours [T2, T3], restaurant address D2, food type set Y, range of food price X2, threshold distance D and threshold price X of the restaurant information C
S1910
S1920
|D2-D1|≤D and T2≤T1≤T3?
No
Yes
S1930
y∈Y?
No
Yes
S1940
X1∩X2≠Ø?
No
Yes
S1950
Determine the restaurant as the target restaurant
S1960
Determine the restaurant not as the target restaurant

FIG. 28

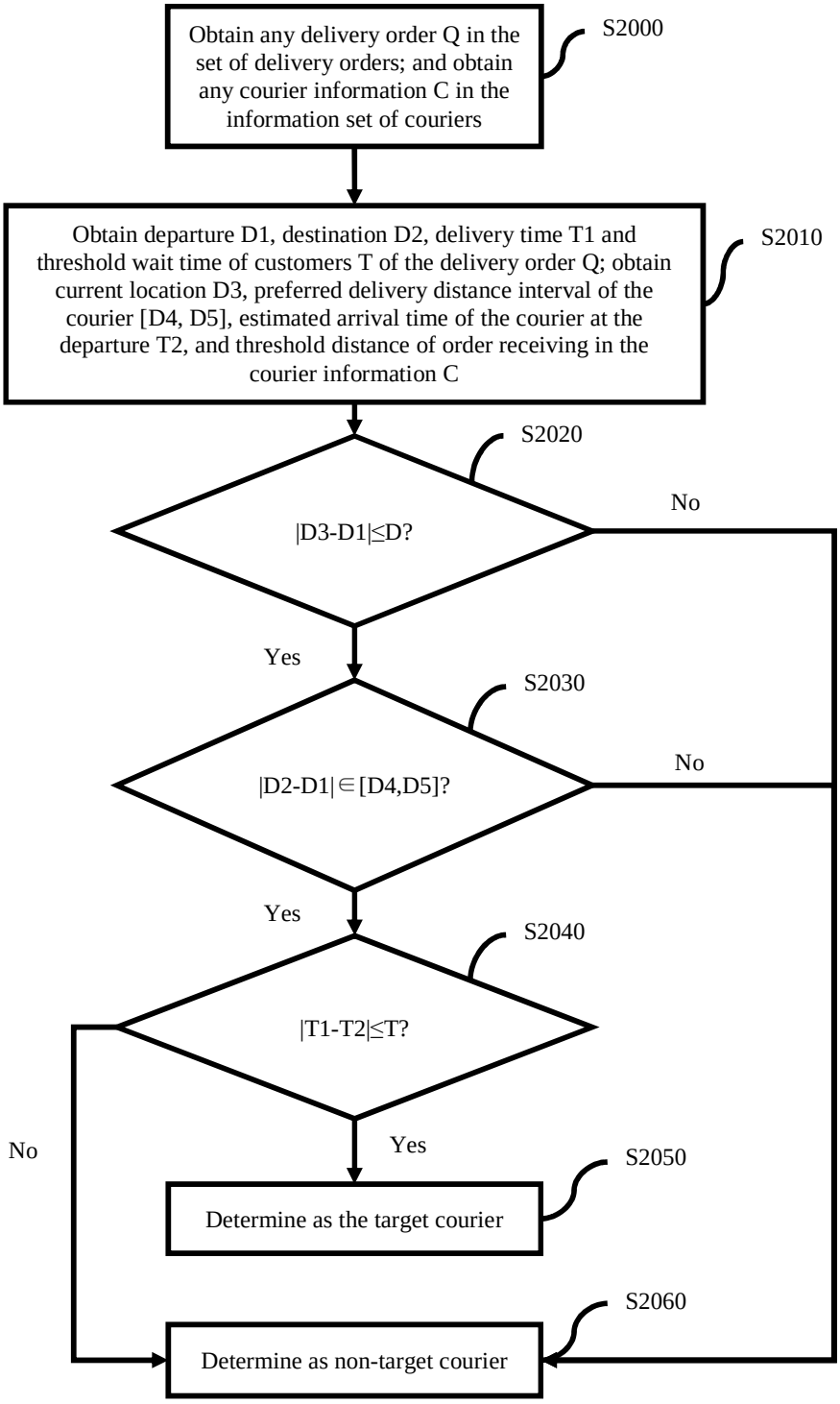

Obtain any delivery order Q in the set of delivery orders; and obtain any courier information C in the information set of couriers
S2000
Obtain departure D1, destination D2, delivery time T1 and threshold wait time of customers T of the delivery order Q; obtain current location D3, preferred delivery distance interval of the courier [D4, D5], estimated arrival time of the courier at the departure T2, and threshold distance of order receiving in the courier information C
S2010
S2020
|D3-D1|≤D?
No
Yes
S2030
|D2-D1|∈[D4,D5]?
No
Yes
S2040
|T1-T2|≤T?
No
Yes
S2050
Determine as the target courier
S2060
Determine as non-target courier

FIG. 29