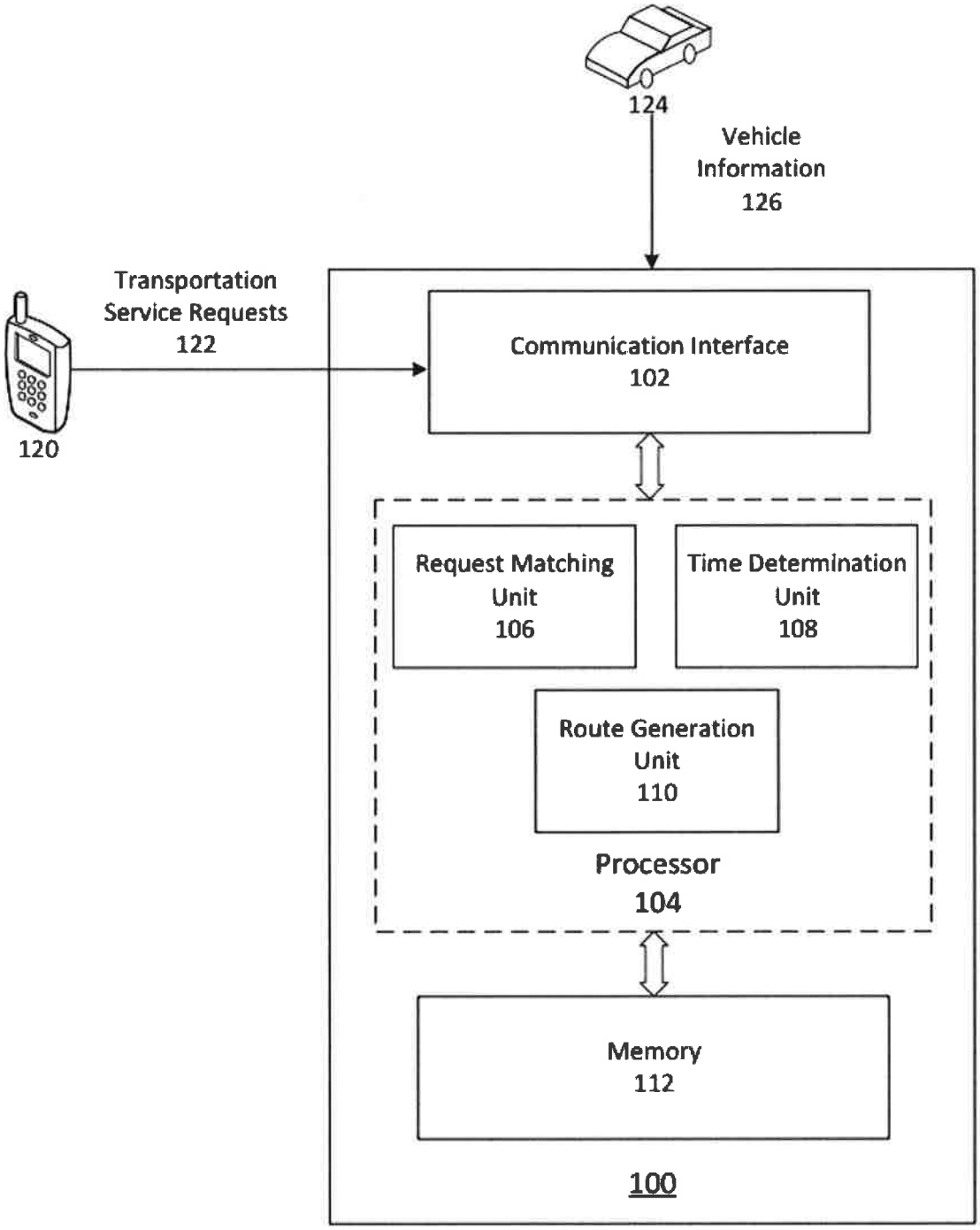

124
Vehicle
Information
126
Transportation
Service Requests
122
120
Communication Interface
102
Request Matching
Unit
106
Time Determination
Unit
108
Route Generation
Unit
110
Processor
104
Memory
112
100

FIG. 1

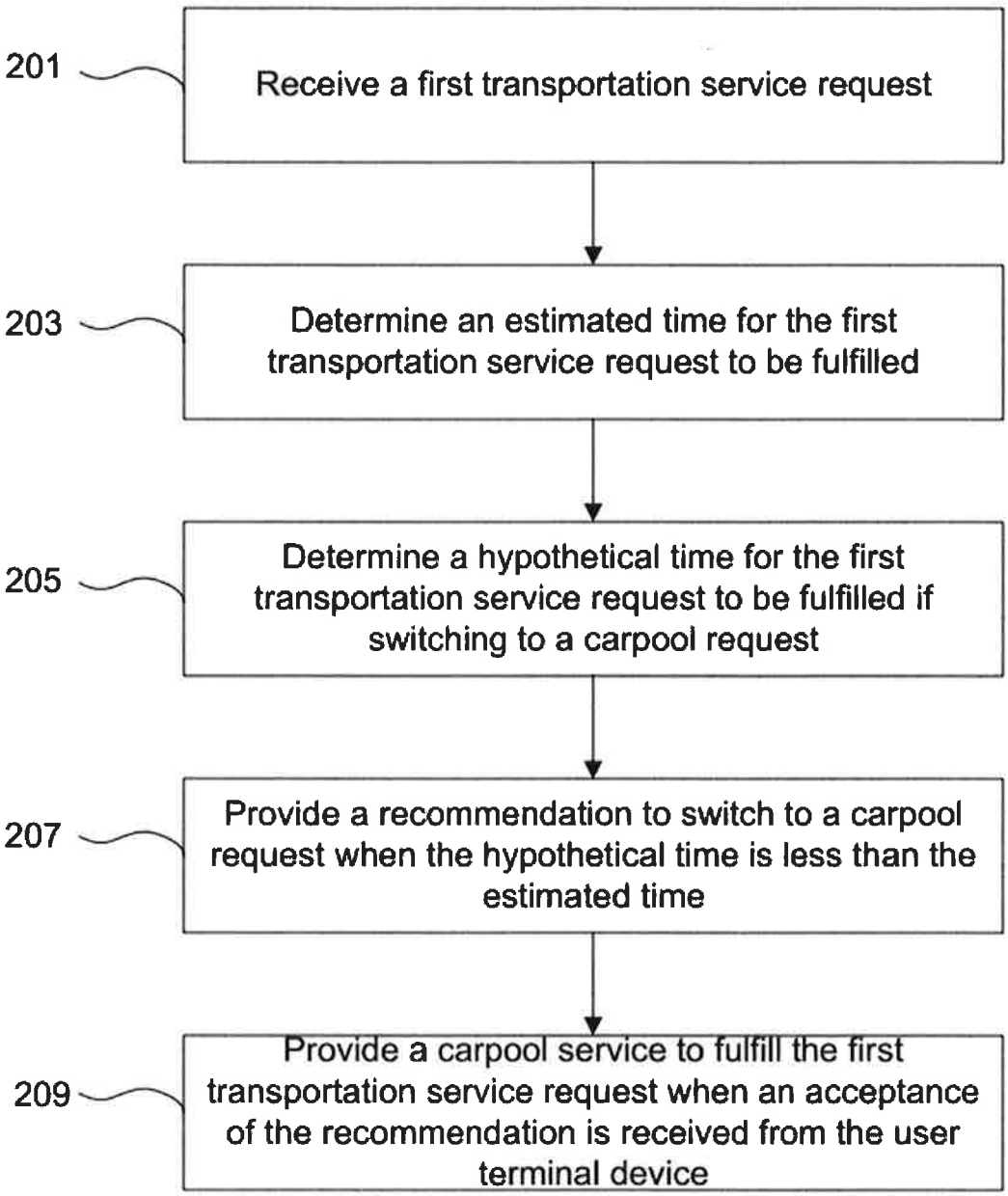

201
Receive a first transportation service request
203
Determine an estimated time for the first transportation service request to be fulfilled
205
Determine a hypothetical time for the first transportation service request to be fulfilled if switching to a carpool request
207
Provide a recommendation to switch to a carpool request when the hypothetical time is less than the estimated time
209
Provide a carpool service to fulfill the first transportation service request when an acceptance of the recommendation is received from the user terminal device
200

FIG. 2

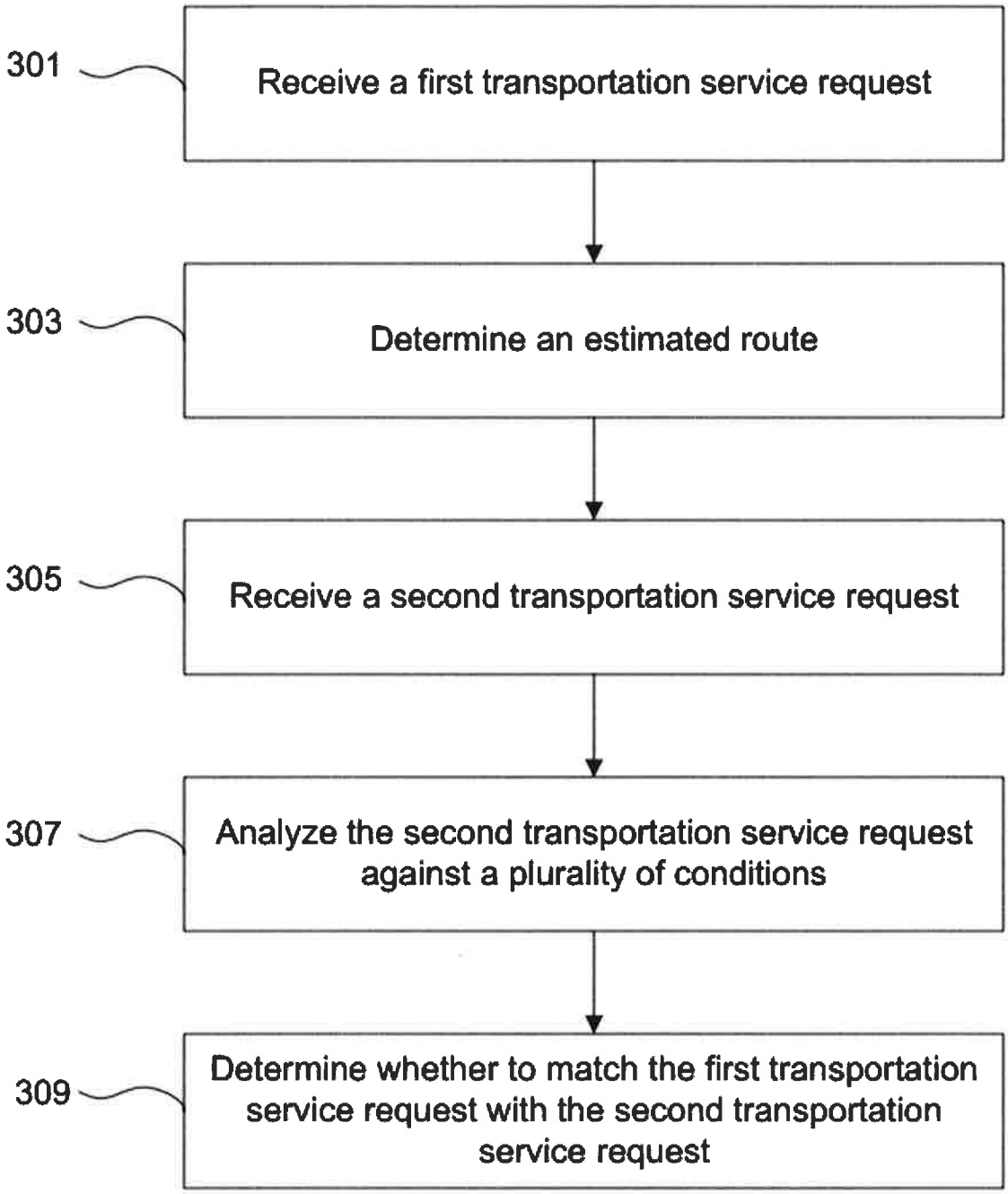

301
Receive a first transportation service request
303
Determine an estimated route
305
Receive a second transportation service request
307
Analyze the second transportation service request against a plurality of conditions
309
Determine whether to match the first transportation service request with the second transportation service request
300

FIG. 3

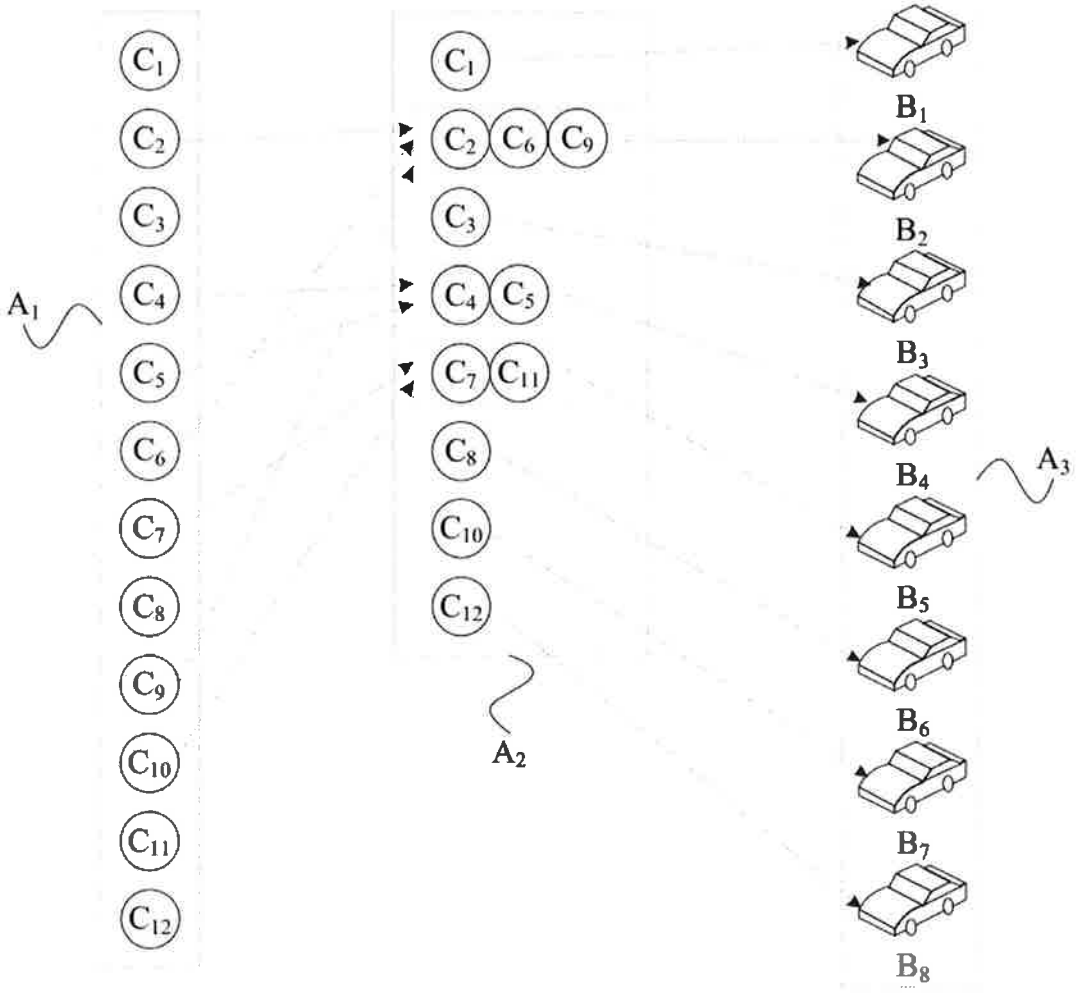

C1
C2
C3
A1
C4
C5
C6
C7
C8
C9
C10
C11
C12
C1
C2 C6 C9
C3
C4 C5
C7 C11
C8
C10
C12
A2
B1
B2
B3
A3
B4
B5
B6
B7
B8

FIG. 4

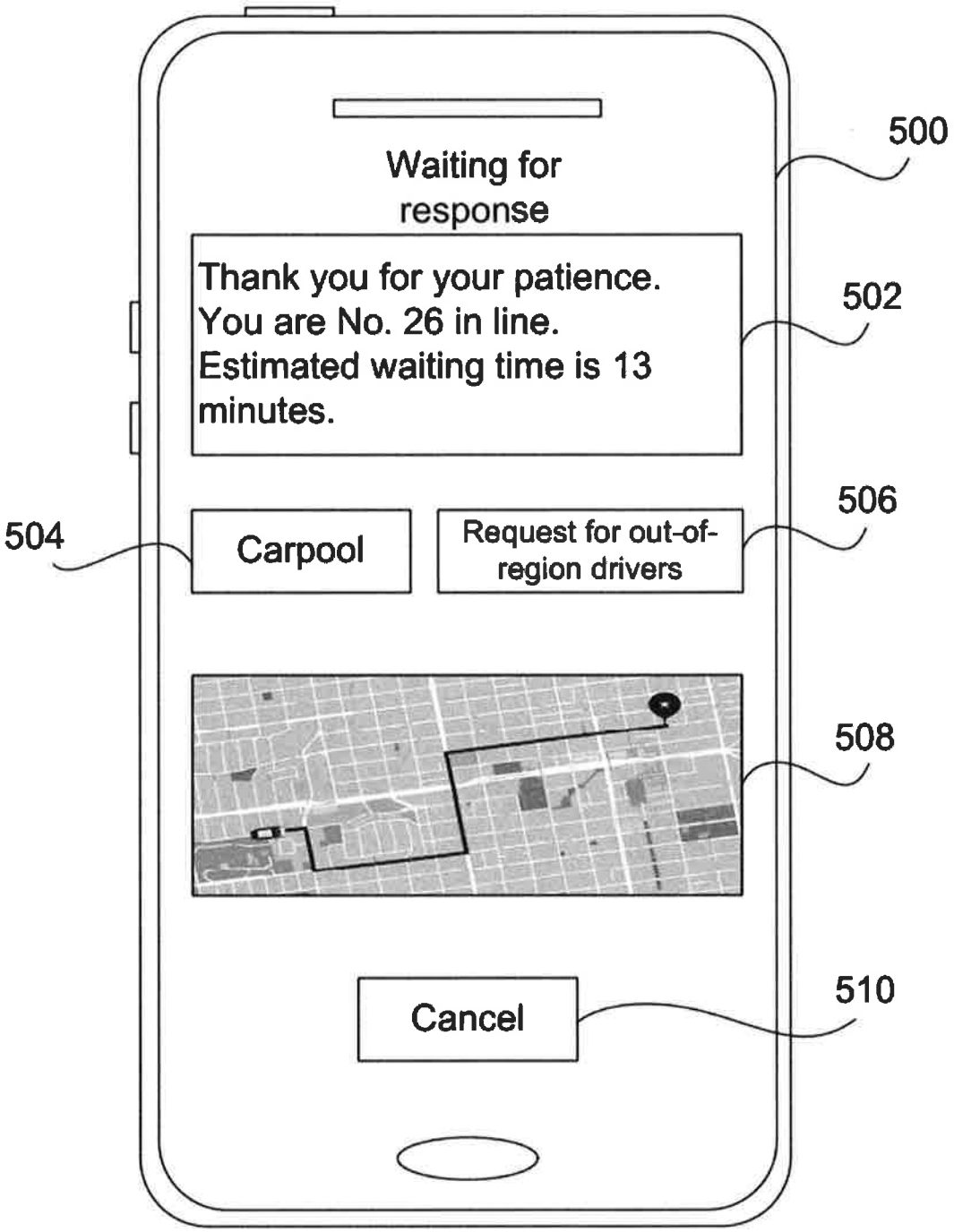

Waiting for response
Thank you for your patience. You are No. 26 in line. Estimated waiting time is 13 minutes.
Carpool
Request for out-of-region drivers
Cancel
500
502
504
506
508
510

FIG. 5

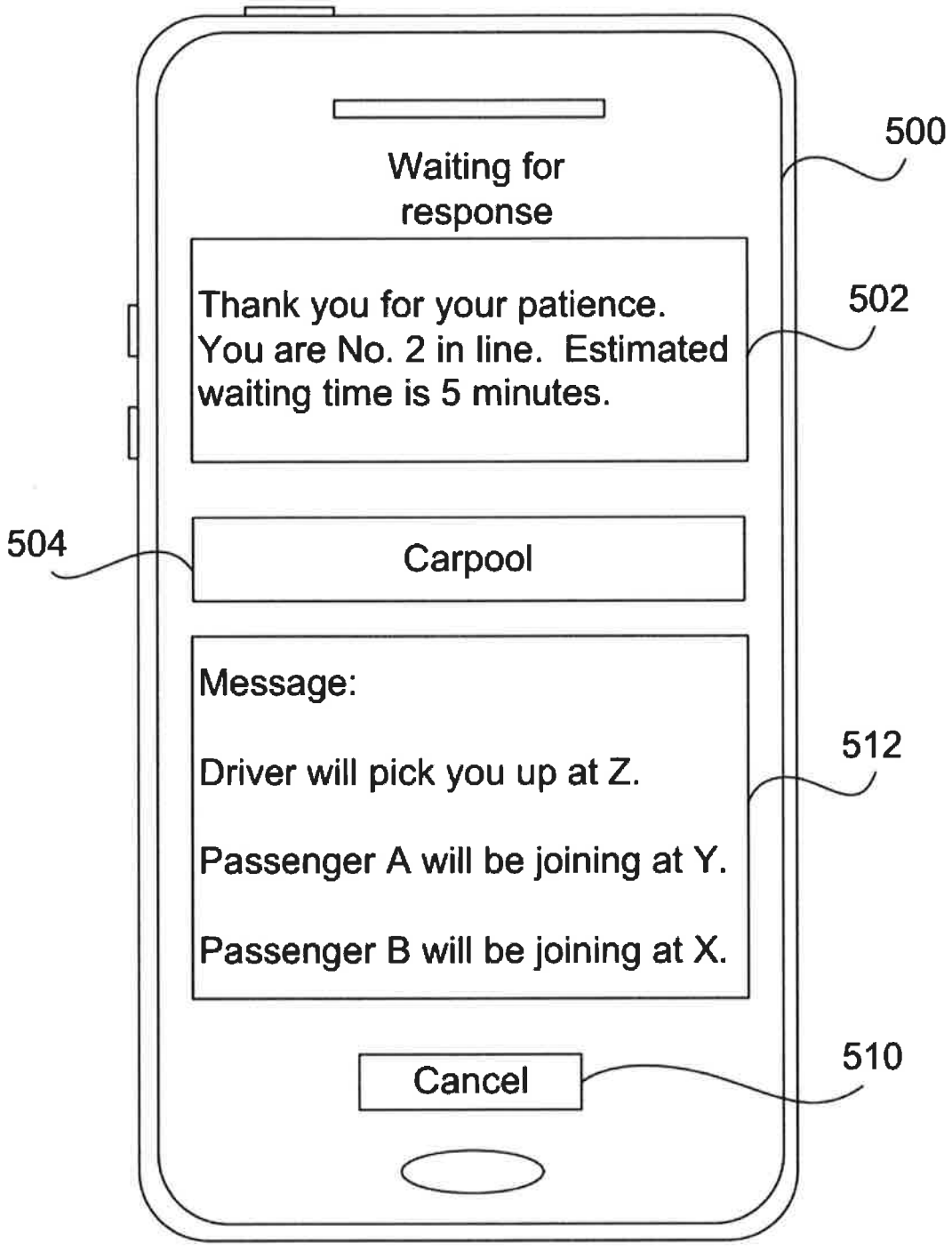

Waiting for response
500
Thank you for your patience. You are No. 2 in line. Estimated waiting time is 5 minutes.
502
504
Carpool
Message:
Driver will pick you up at Z.
Passenger A will be joining at Y.
Passenger B will be joining at X.
512
Cancel
510

FIG. 6