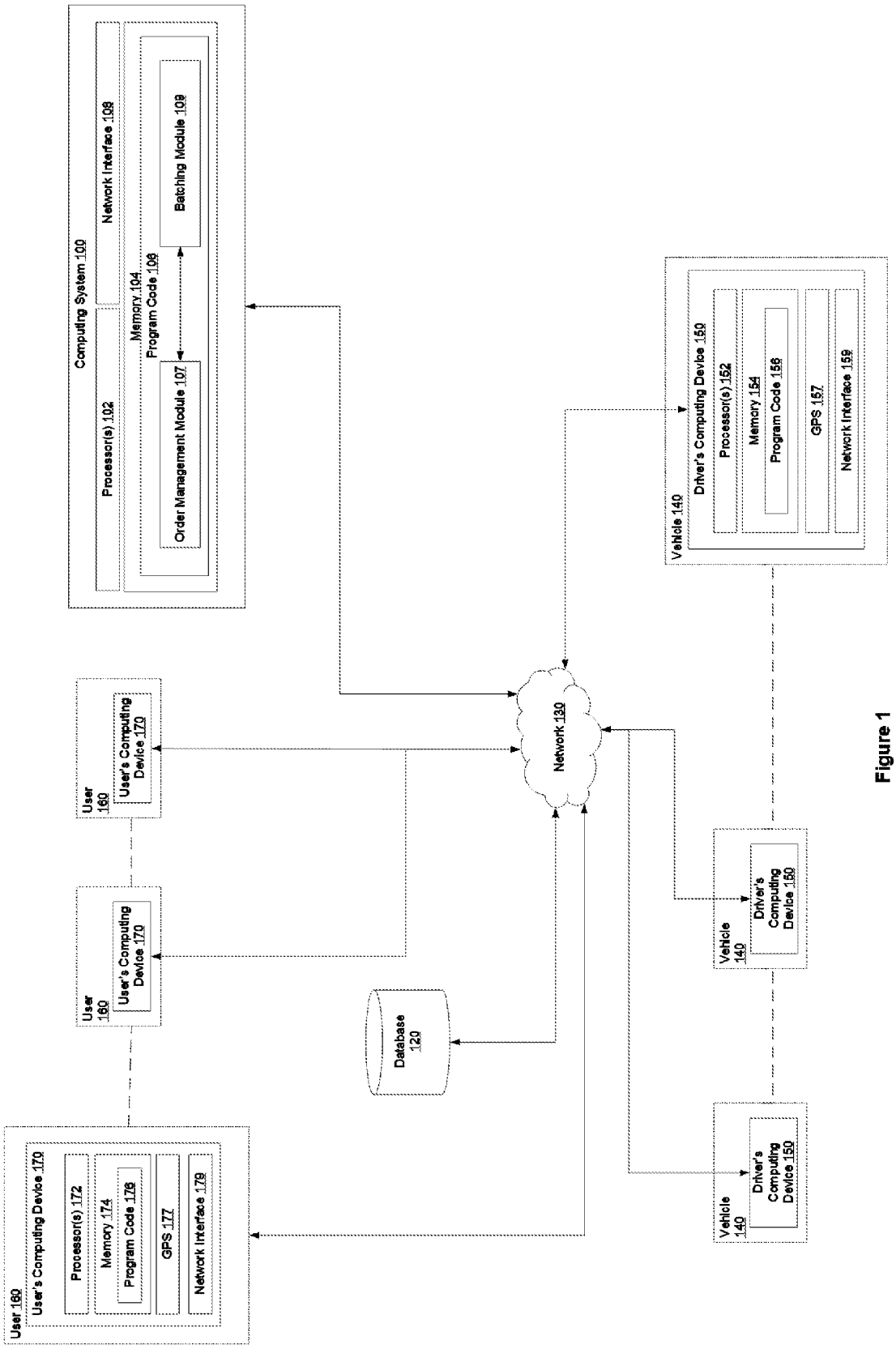

Computing System 100
Processor(s) 102
Network Interface 109
Memory 104
Program Code 106
Batching Module 109
Order Management Module 107
Vehicle 140
Driver's Computing Device 150
Processor(s) 152
Memory 154
Program Code 156
GPS 157
Network Interface 159
Network 130
User 160
User's Computing Device 170
User 160
User's Computing Device 170
Database 120
Vehicle 140
Driver's Computing Device 150
Vehicle 140
Driver's Computing Device 150
User 180
User's Computing Device 170
Processor(s) 172
Memory 174
Program Code 176
GPS 177
Network Interface 179

Figure 1

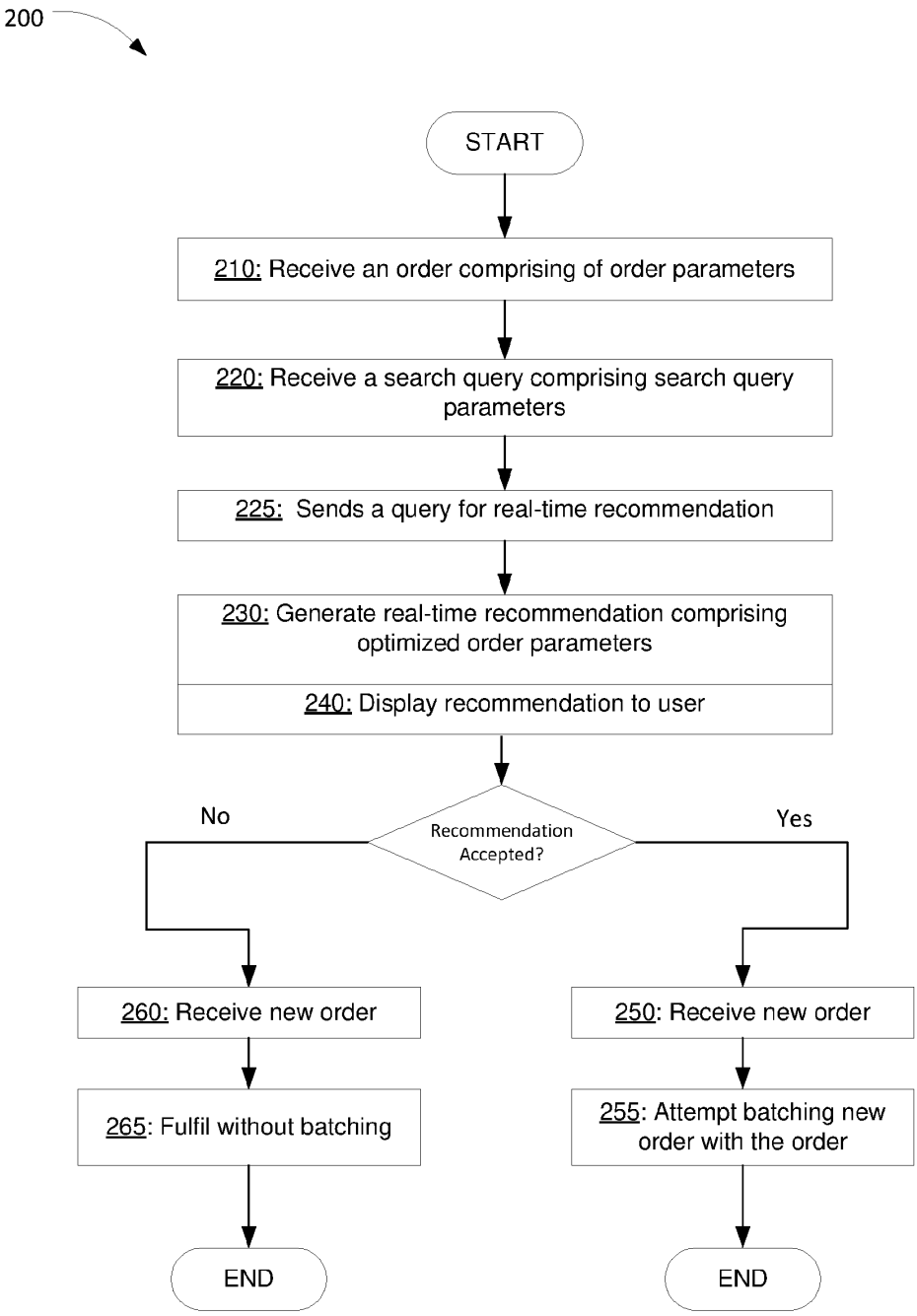

200
START
210: Receive an order comprising of order parameters
220: Receive a search query comprising search query parameters
225: Sends a query for real-time recommendation
230: Generate real-time recommendation comprising optimized order parameters
240: Display recommendation to user
Recommendation Accepted?
No
Yes
260: Receive new order
265: Fulfil without batching
END
250: Receive new order
255: Attempt batching new order with the order
END

Figure 2

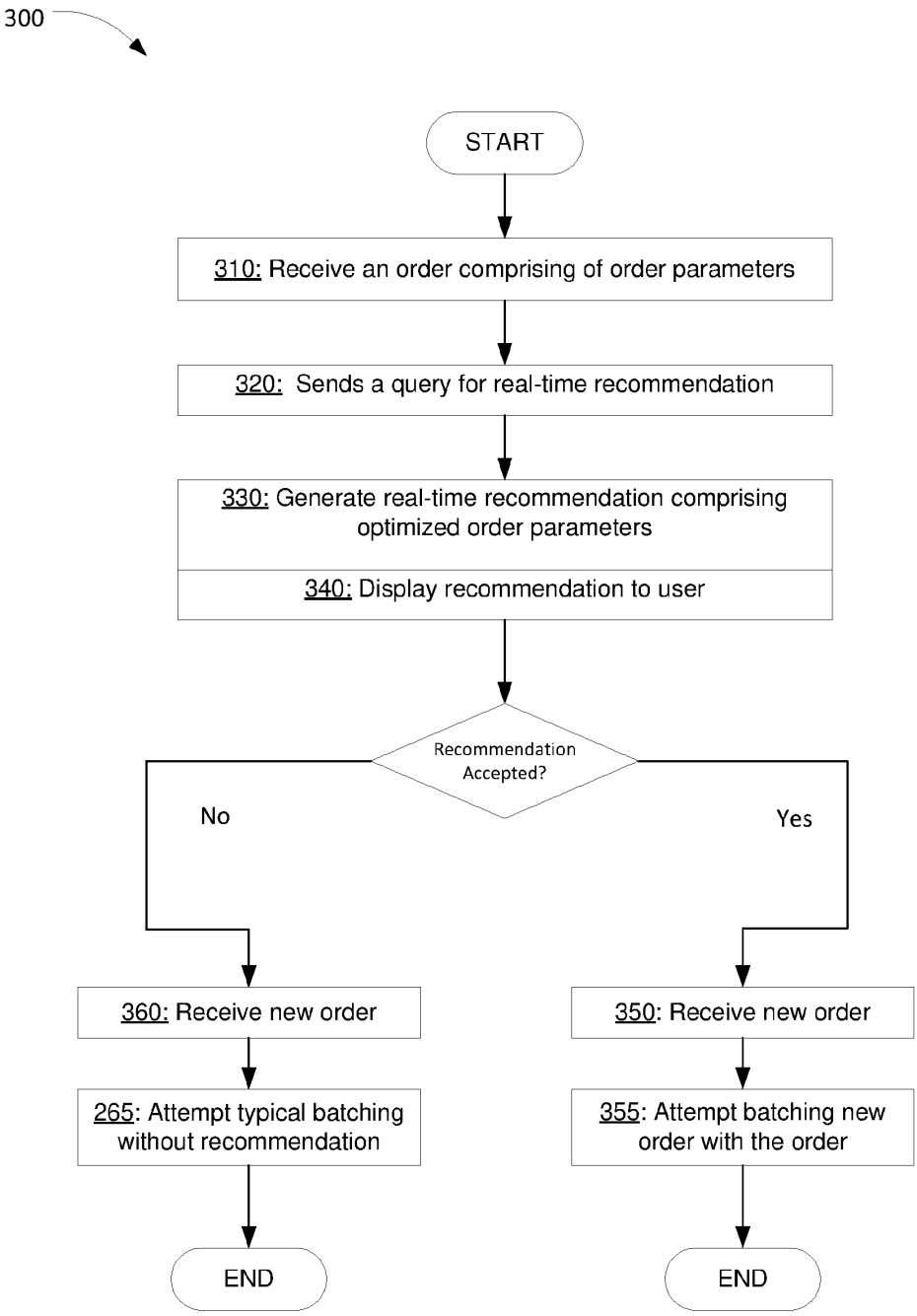

300
START
310: Receive an order comprising of order parameters
320: Sends a query for real-time recommendation
330: Generate real-time recommendation comprising optimized order parameters
340: Display recommendation to user
Recommendation Accepted?
No
Yes
360: Receive new order
265: Attempt typical batching without recommendation
END
350: Receive new order
355: Attempt batching new order with the order
END

Figure 3

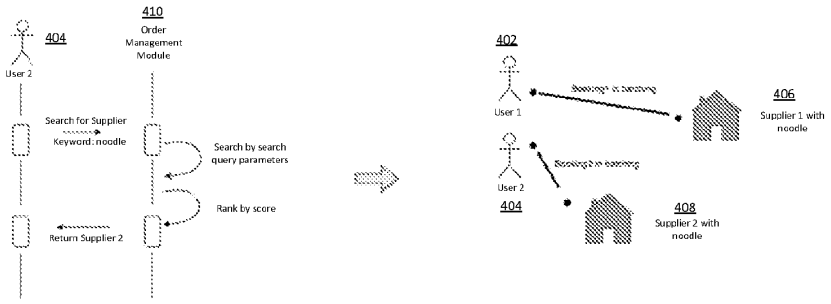


Figure 4a

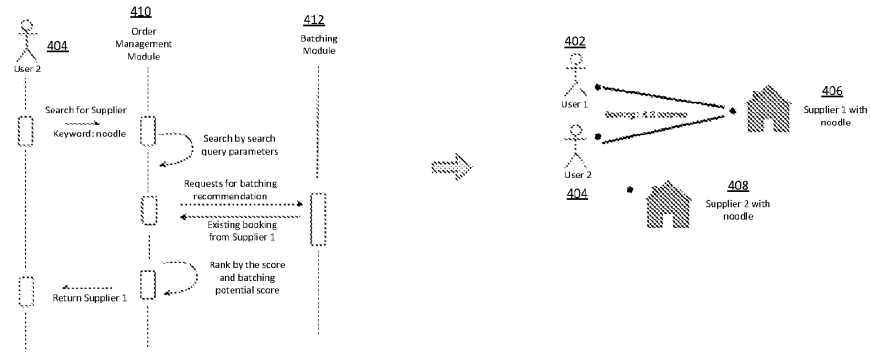
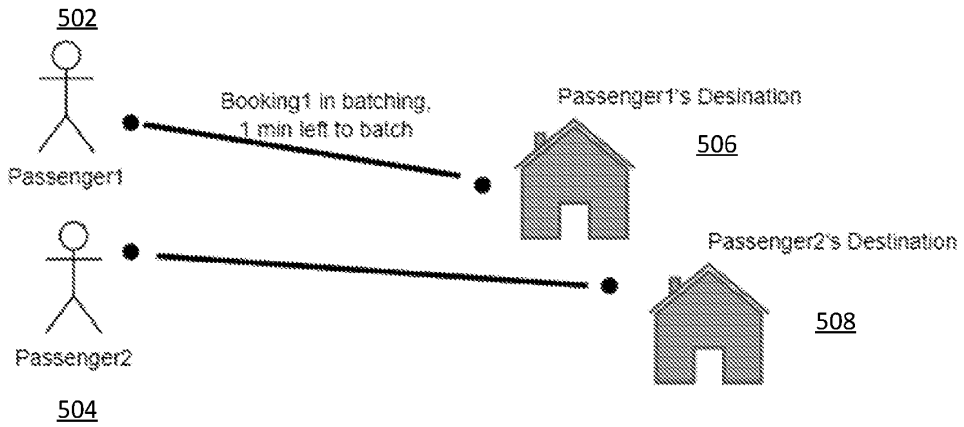


Figure 4b


502
Booking1 in batching, 1 min left to batch
Passenger1's Desination
506
Passenger1
Passenger2's Destination
508
Passenger2
504

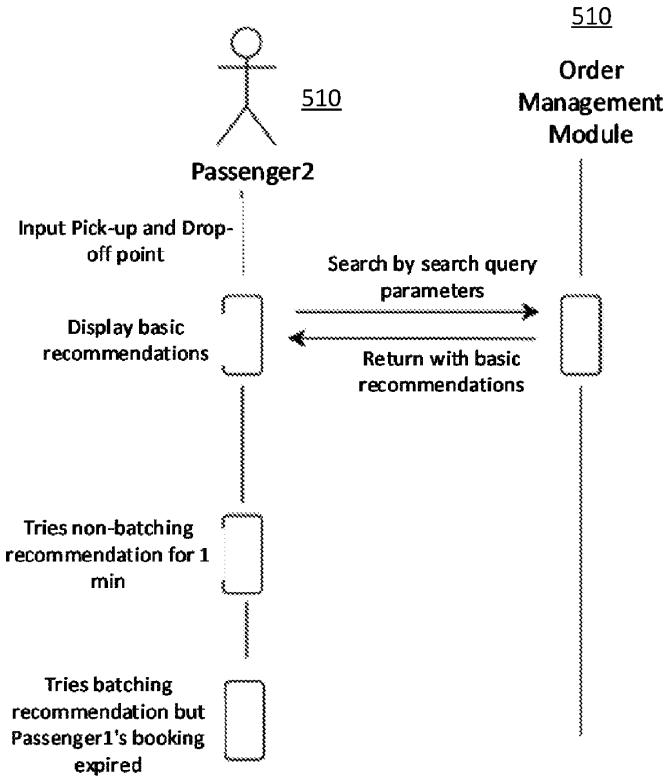

510
510
Order Management Module
Passenger2
Input Pick-up and Drop-off point
Search by search query parameters
Display basic recommendations
Return with basic recommendations
Tries non-batching recommendation for 1 min
Tries batching recommendation but Passenger1's booking expired

Figure 5a

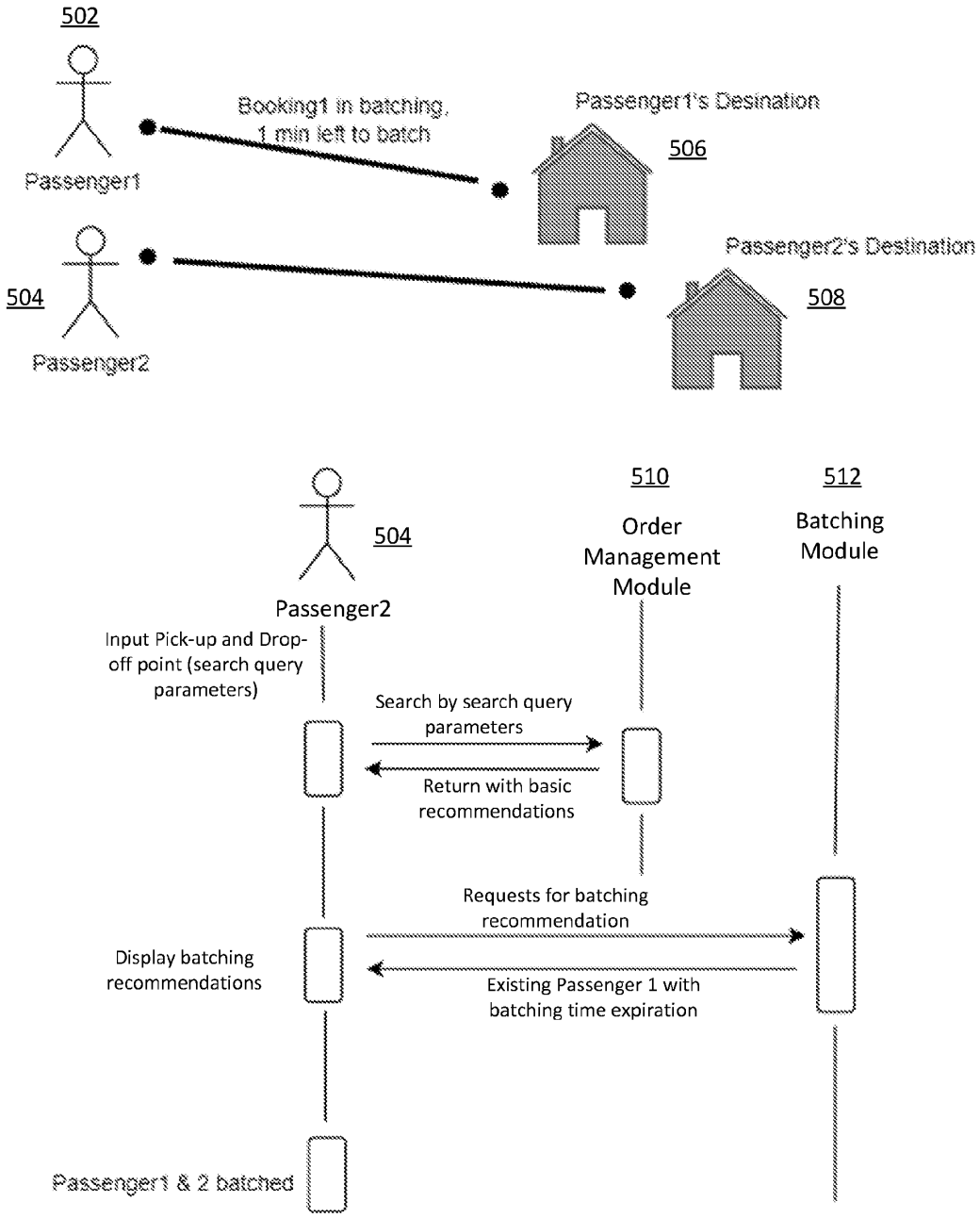

502
Passenger1
Booking1 in batching,
1 min left to batch
Passenger1's Desination
506
504
Passenger2
Passenger2's Destination
508
504
Passenger2
510
Order
Management
Module
512
Batching
Module
Input Pick-up and Drop-
off point (search query
parameters)
Search by search query
parameters
Return with basic
recommendations
Requests for batching
recommendation
Display batching
recommendations
Existing Passenger 1 with
batching time expiration
Passenger1 & 2 batched

Figure 5b