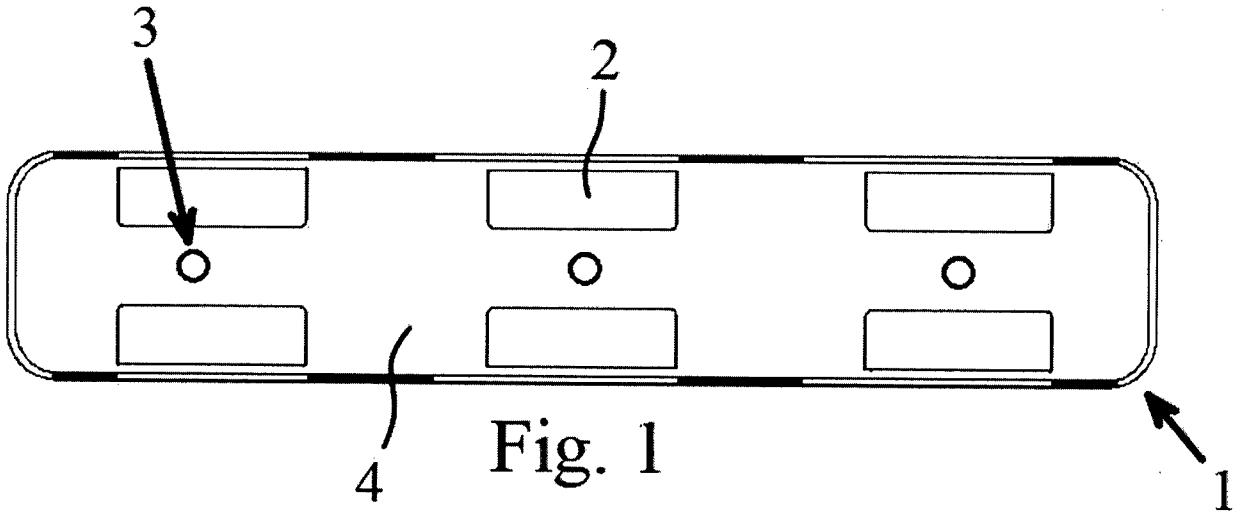


Fig. 1

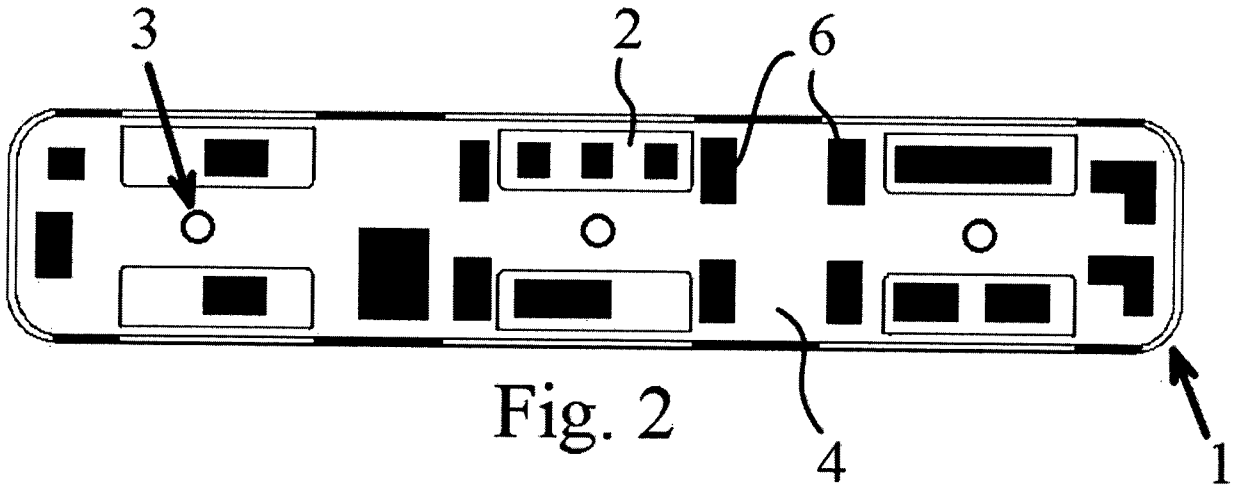


Fig. 2

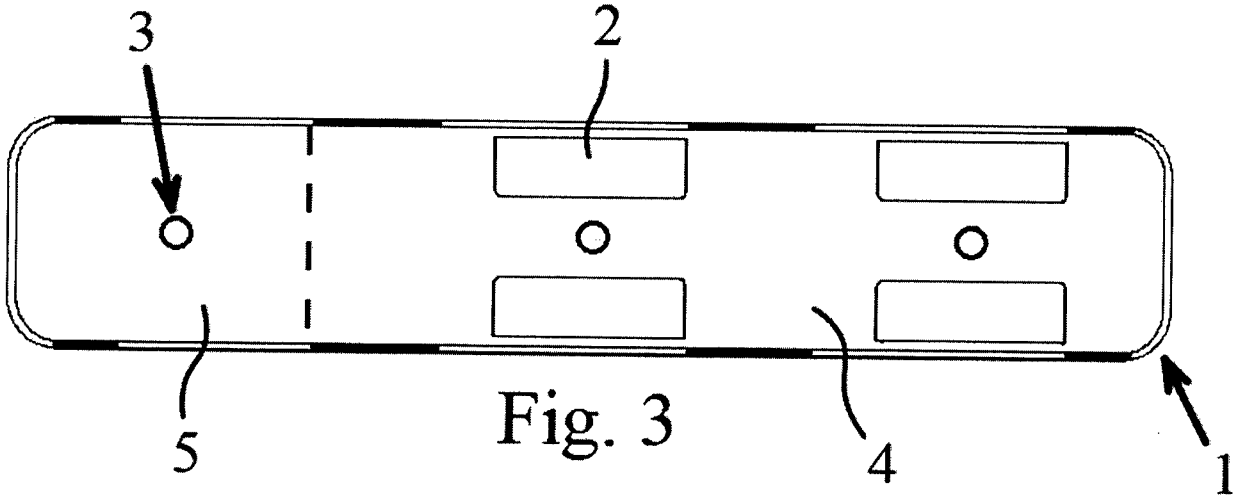


Fig. 3

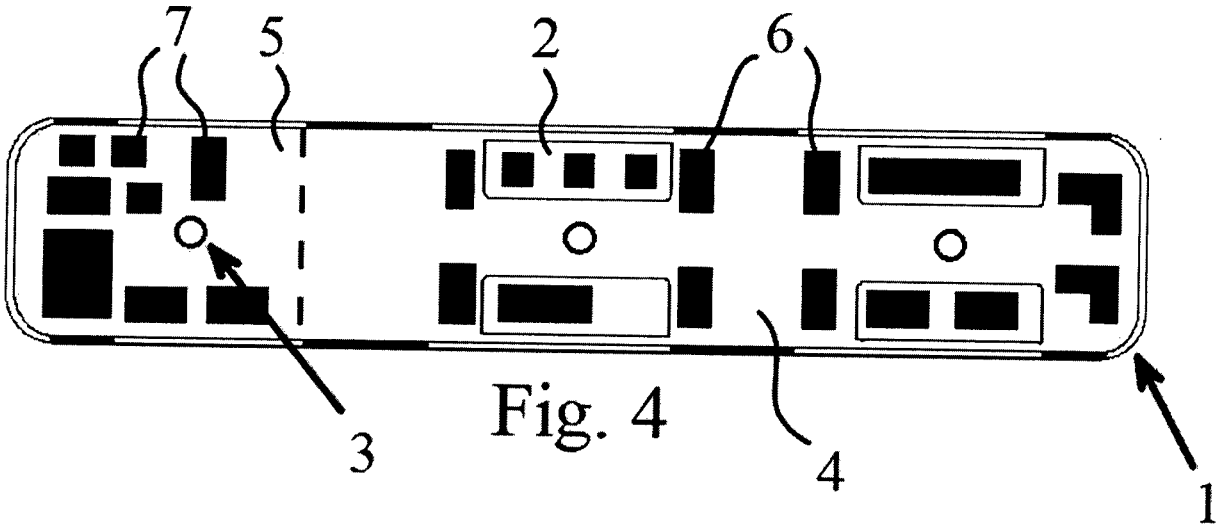


Fig. 4

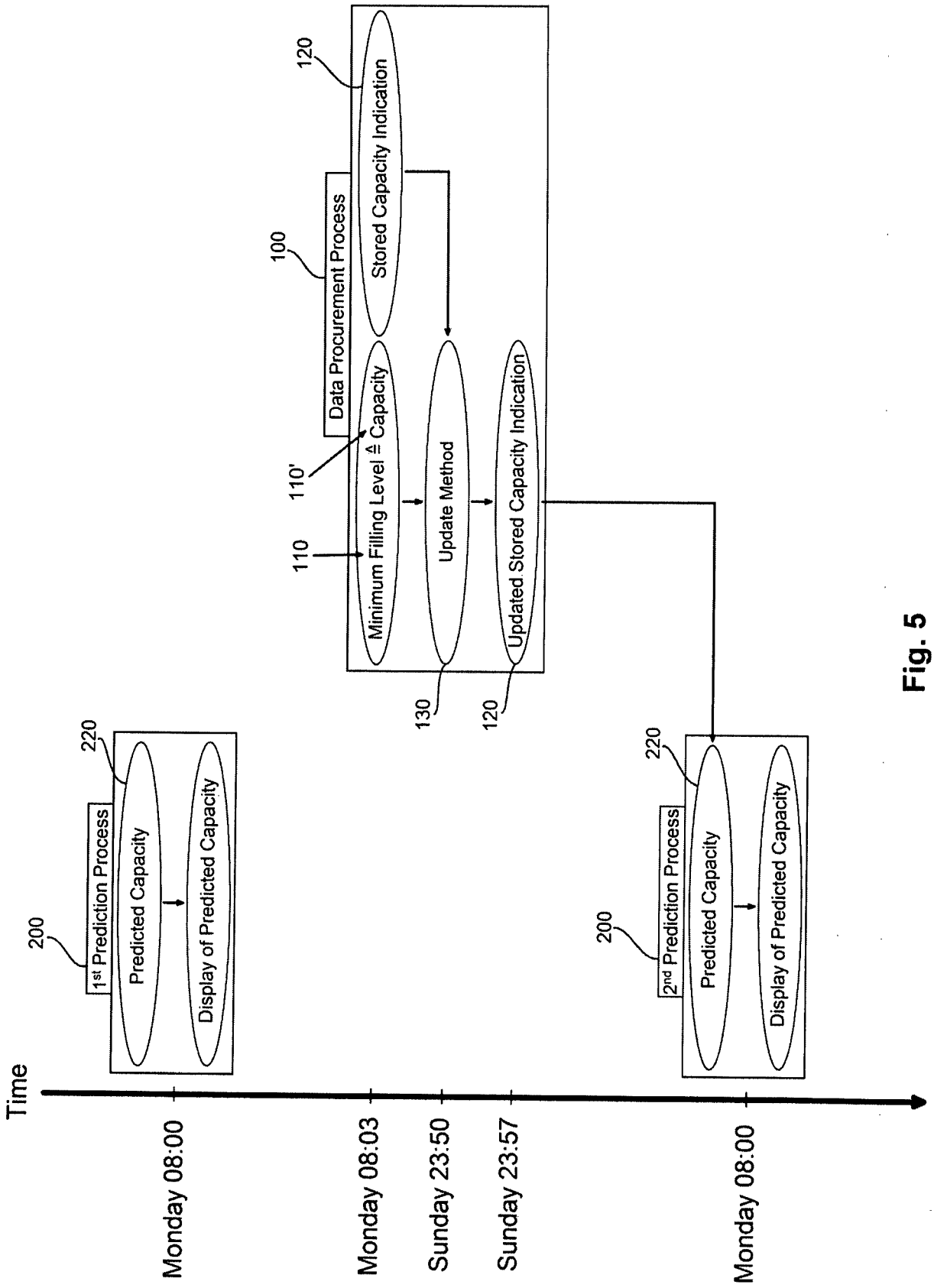

Time
Monday 08:00
Monday 08:03
Sunday 23:50
Sunday 23:57
Monday 08:00
200
1st Prediction Process
220
Predicted Capacity
Display of Predicted Capacity
100
Data Procurement Process
110
110'
Minimum Filling Level ≙ Capacity
Update Method
Updated Stored Capacity Indication
120
Stored Capacity Indication
130
120
200
2nd Prediction Process
220
Predicted Capacity
Display of Predicted Capacity

Fig. 5

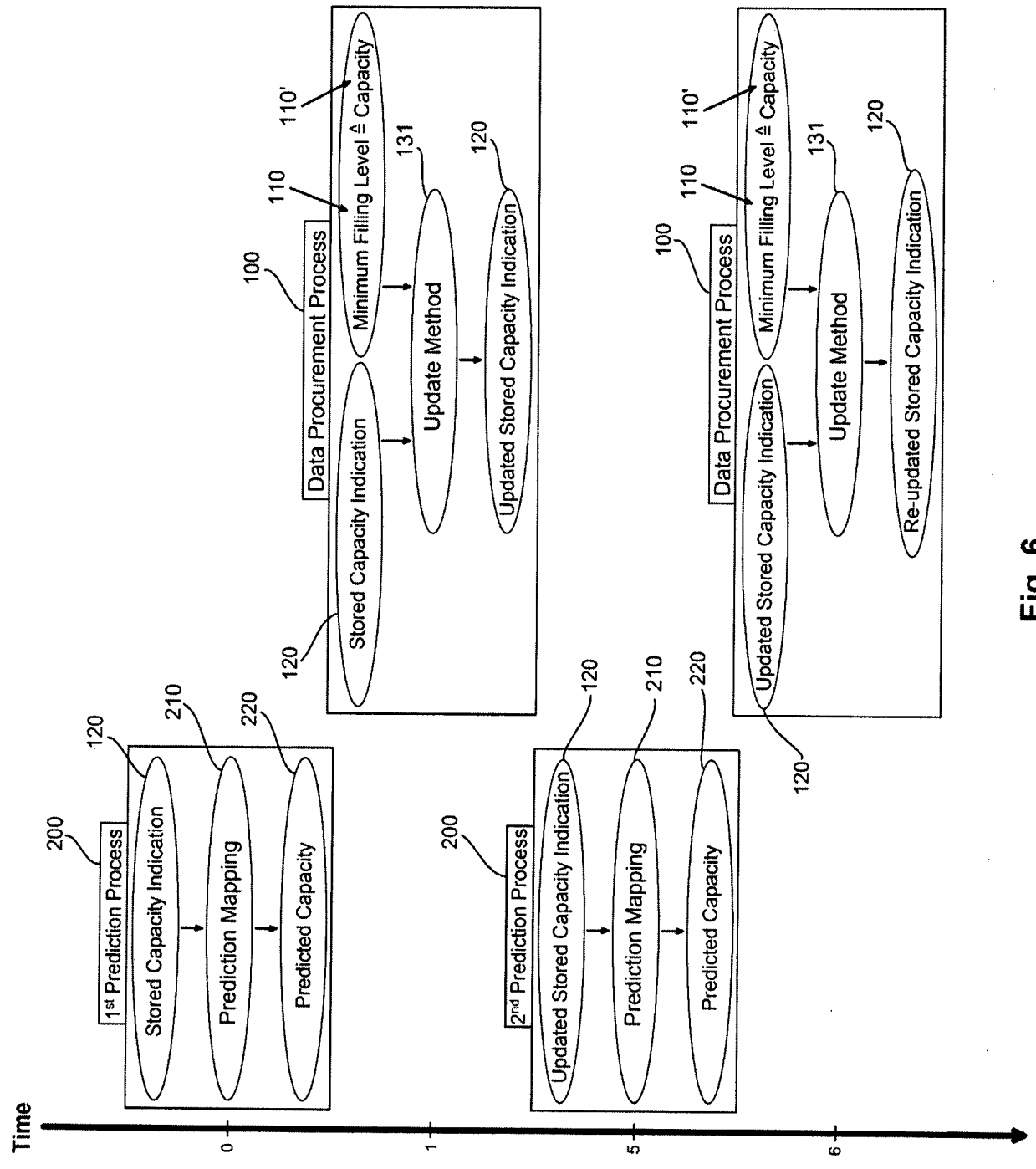

Time
0
1
5
6
200
1st Prediction Process
120
Stored Capacity Indication
210
Prediction Mapping
220
Predicted Capacity
100
Data Procurement Process
110
110'
Minimum Filling Level ≙ Capacity
131
Update Method
120
Updated Stored Capacity Indication
120
Stored Capacity Indication
200
2nd Prediction Process
120
Updated Stored Capacity Indication
210
Prediction Mapping
220
Predicted Capacity
100
Data Procurement Process
110
110'
Minimum Filling Level ≙ Capacity
131
Update Method
120
Re-updated Stored Capacity Indication
120
Updated Stored Capacity Indication

Fig. 6

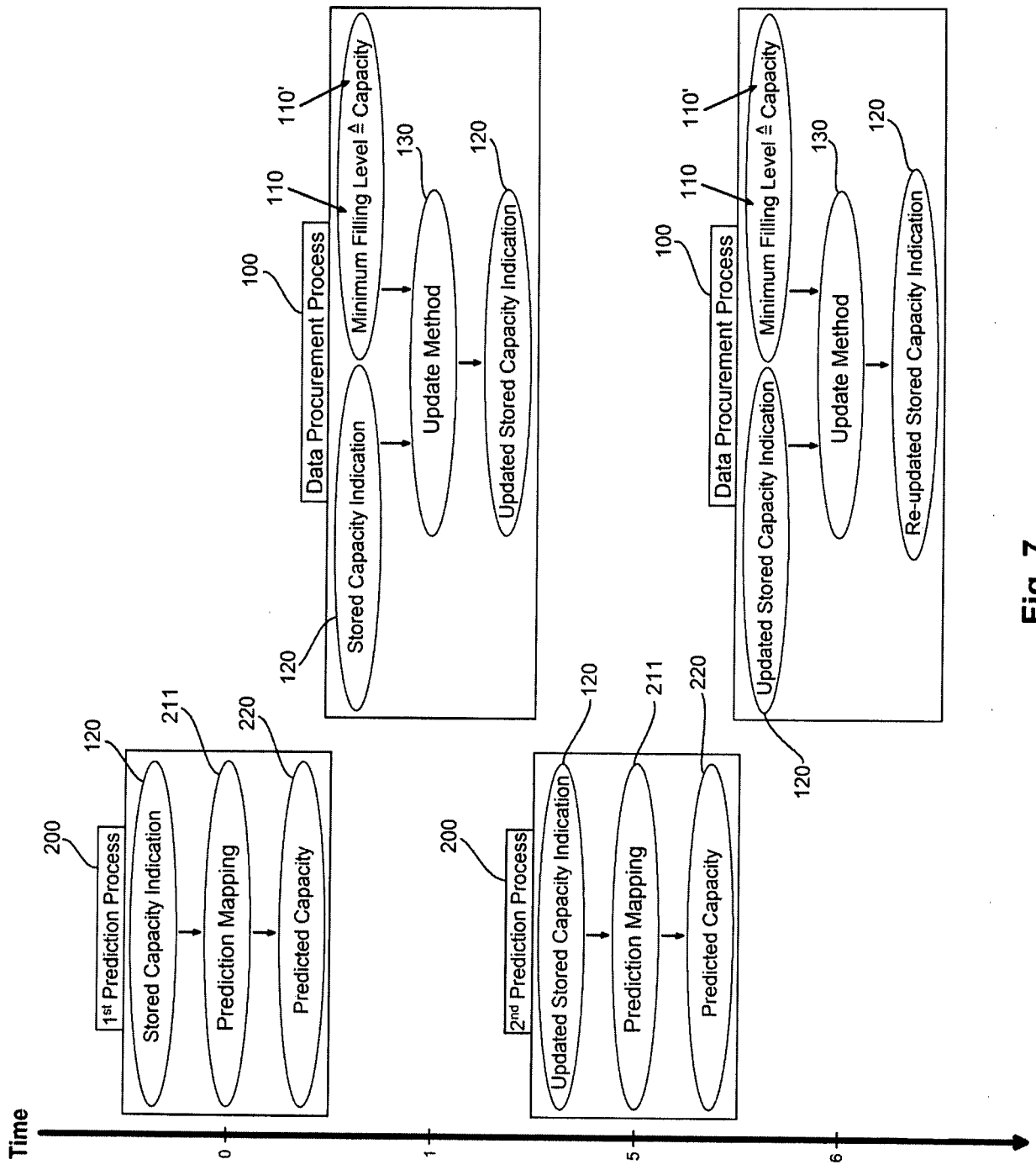

Time
0
1
5
6
200
1st Prediction Process
120
Stored Capacity Indication
211
Prediction Mapping
220
Predicted Capacity
100
Data Procurement Process
110
Minimum Filling Level ≙ Capacity
110'
120
Stored Capacity Indication
130
Update Method
120
Updated Stored Capacity Indication
200
2nd Prediction Process
120
Updated Stored Capacity Indication
211
Prediction Mapping
220
Predicted Capacity
100
Data Procurement Process
110
Minimum Filling Level ≙ Capacity
110'
120
Updated Stored Capacity Indication
130
Update Method
120
Re-updated Stored Capacity Indication

Fig. 7

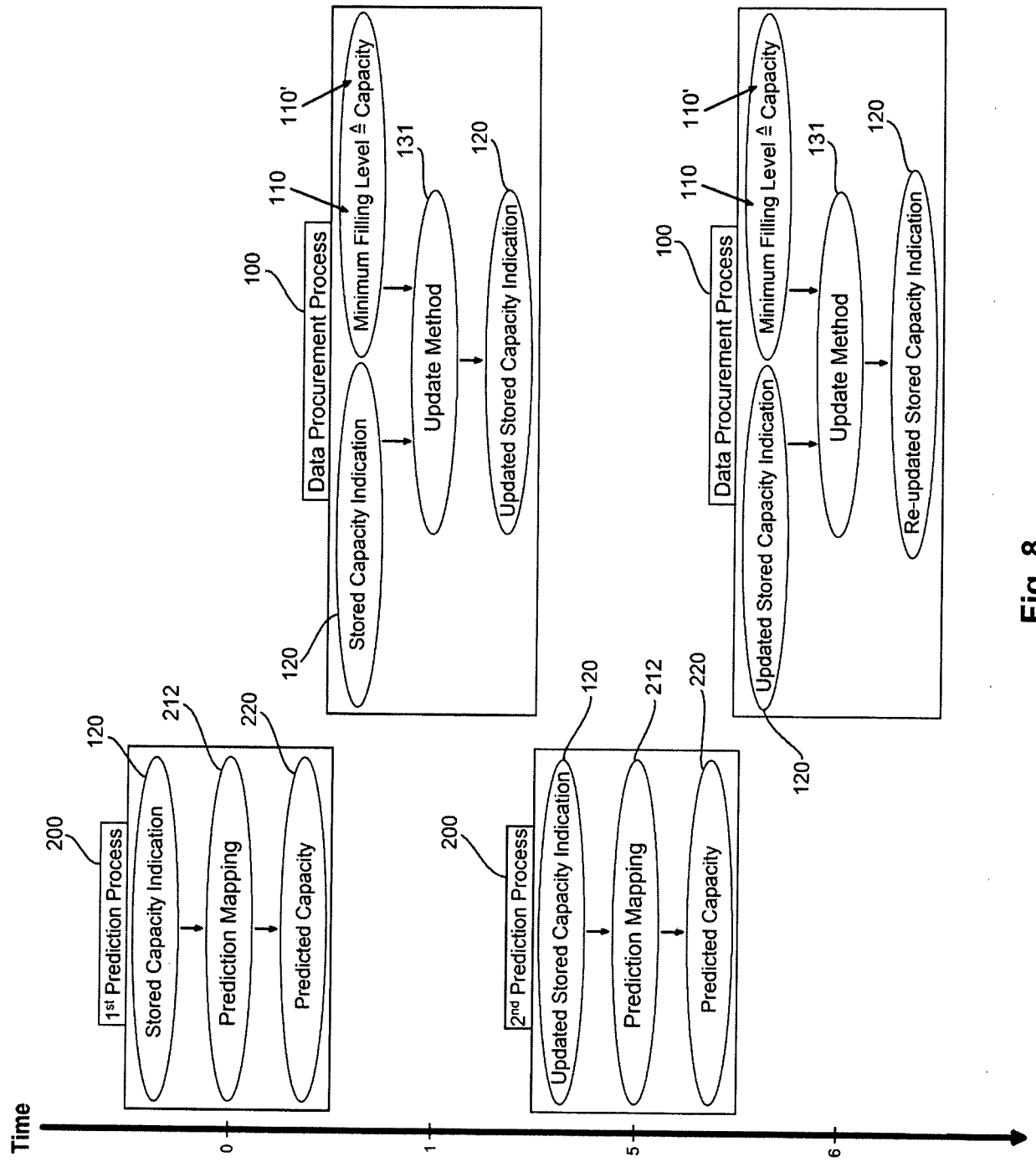

Time
0
1
5
6
200
1st Prediction Process
120
Stored Capacity Indication
212
Prediction Mapping
220
Predicted Capacity
100
Data Procurement Process
110
110'
Minimum Filling Level ≙ Capacity
Stored Capacity Indication
120
131
Update Method
120
Updated Stored Capacity Indication
200
2nd Prediction Process
120
Updated Stored Capacity Indication
212
Prediction Mapping
220
Predicted Capacity
100
Data Procurement Process
110
110'
Minimum Filling Level ≙ Capacity
Updated Stored Capacity Indication
120
131
Update Method
120
Re-updated Stored Capacity Indication

Fig. 8

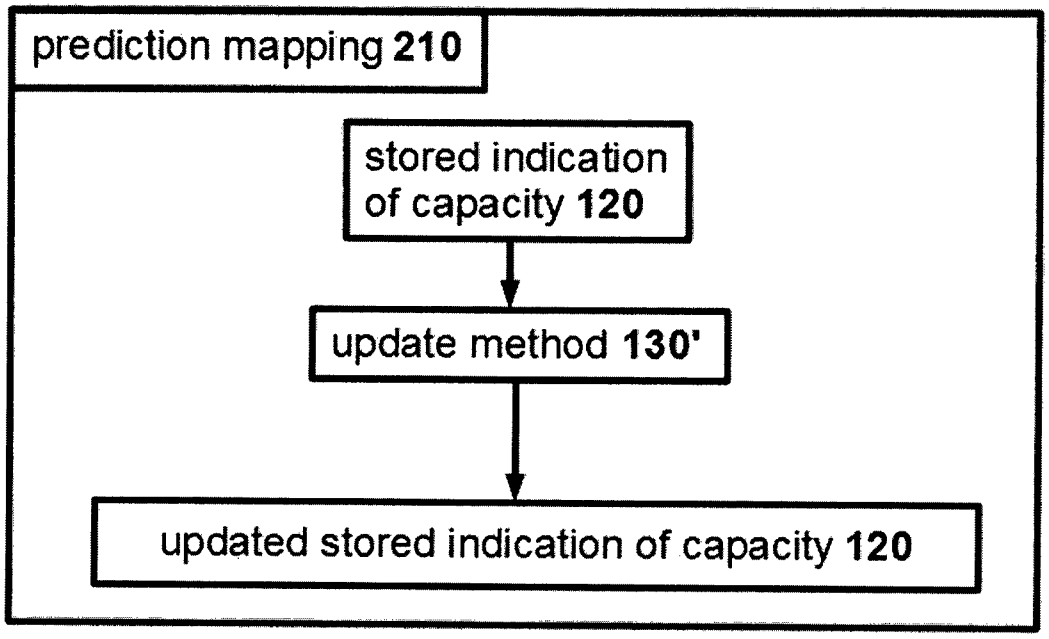

prediction mapping 210
stored indication of capacity 120
update method 130'
updated stored indication of capacity 120

Fig. 9

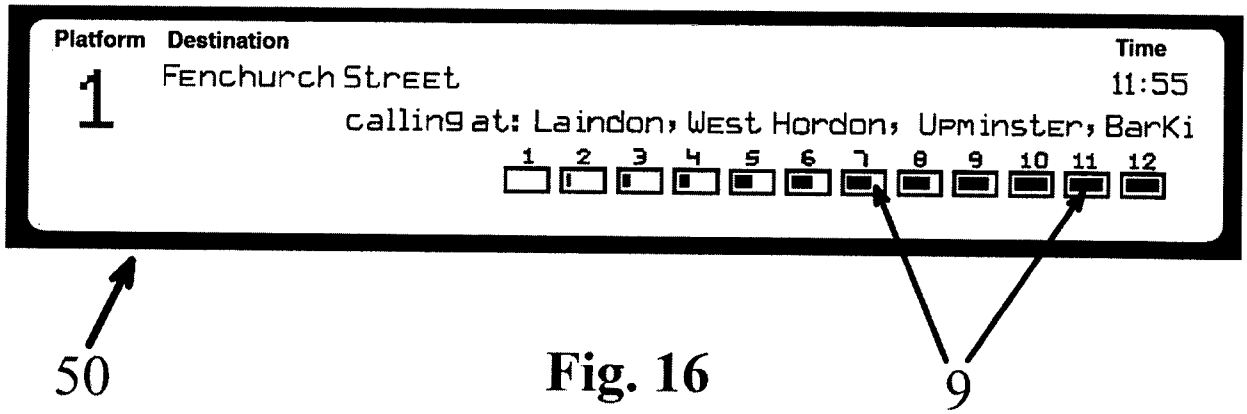

Platform
Destination
Time
1
Fenchurch Street
11:55
calling at: Laindon, West Hordon, Upminster, BarKi
1 2 3 4 5 6 7 8 9 10 11 12
50
9

Fig. 16

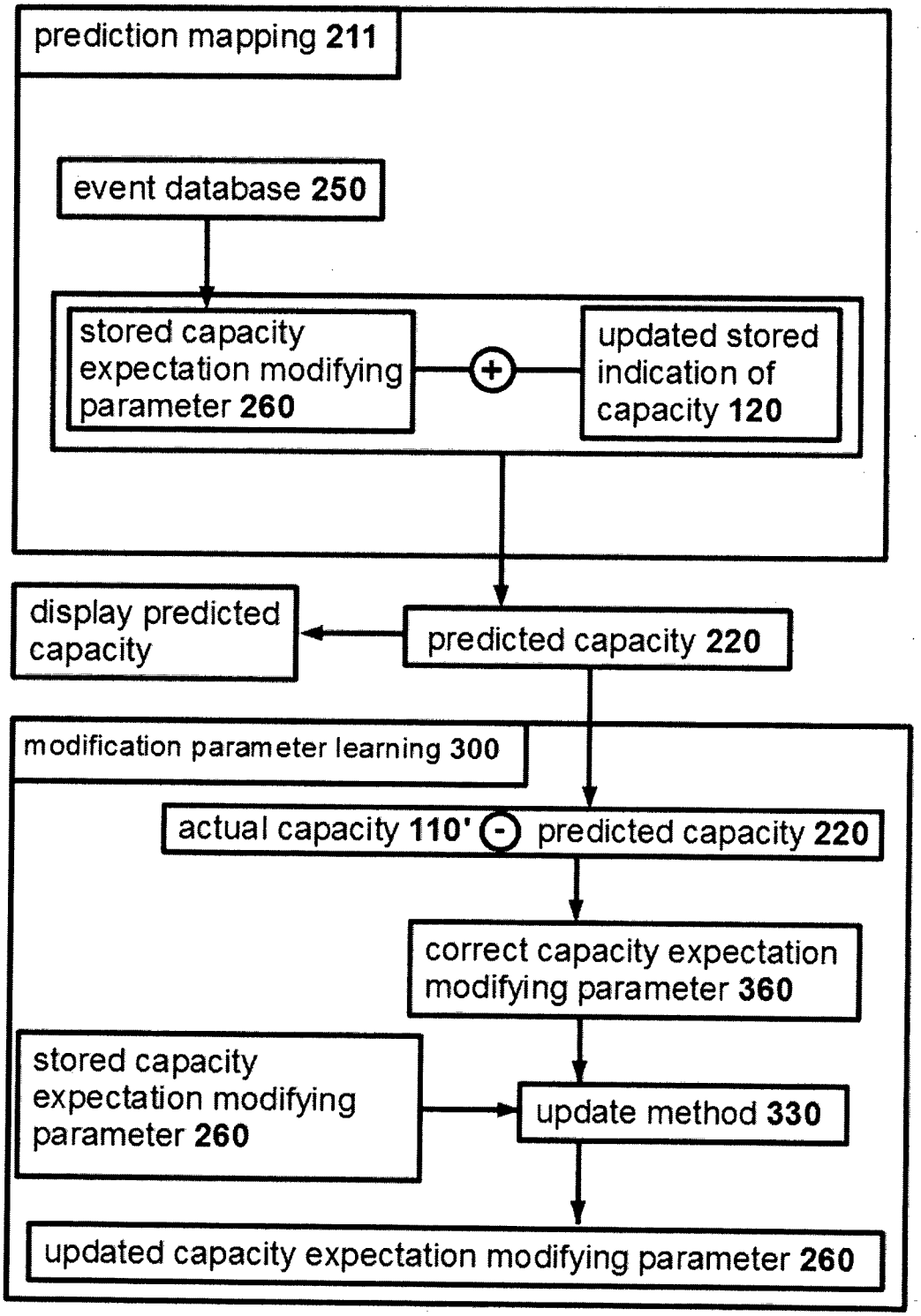

prediction mapping 211
event database 250
stored capacity expectation modifying parameter 260
+
updated stored indication of capacity 120
display predicted capacity
predicted capacity 220
modification parameter learning 300
actual capacity 110'
-
predicted capacity 220
correct capacity expectation modifying parameter 360
stored capacity expectation modifying parameter 260
update method 330
updated capacity expectation modifying parameter 260

Fig. 10

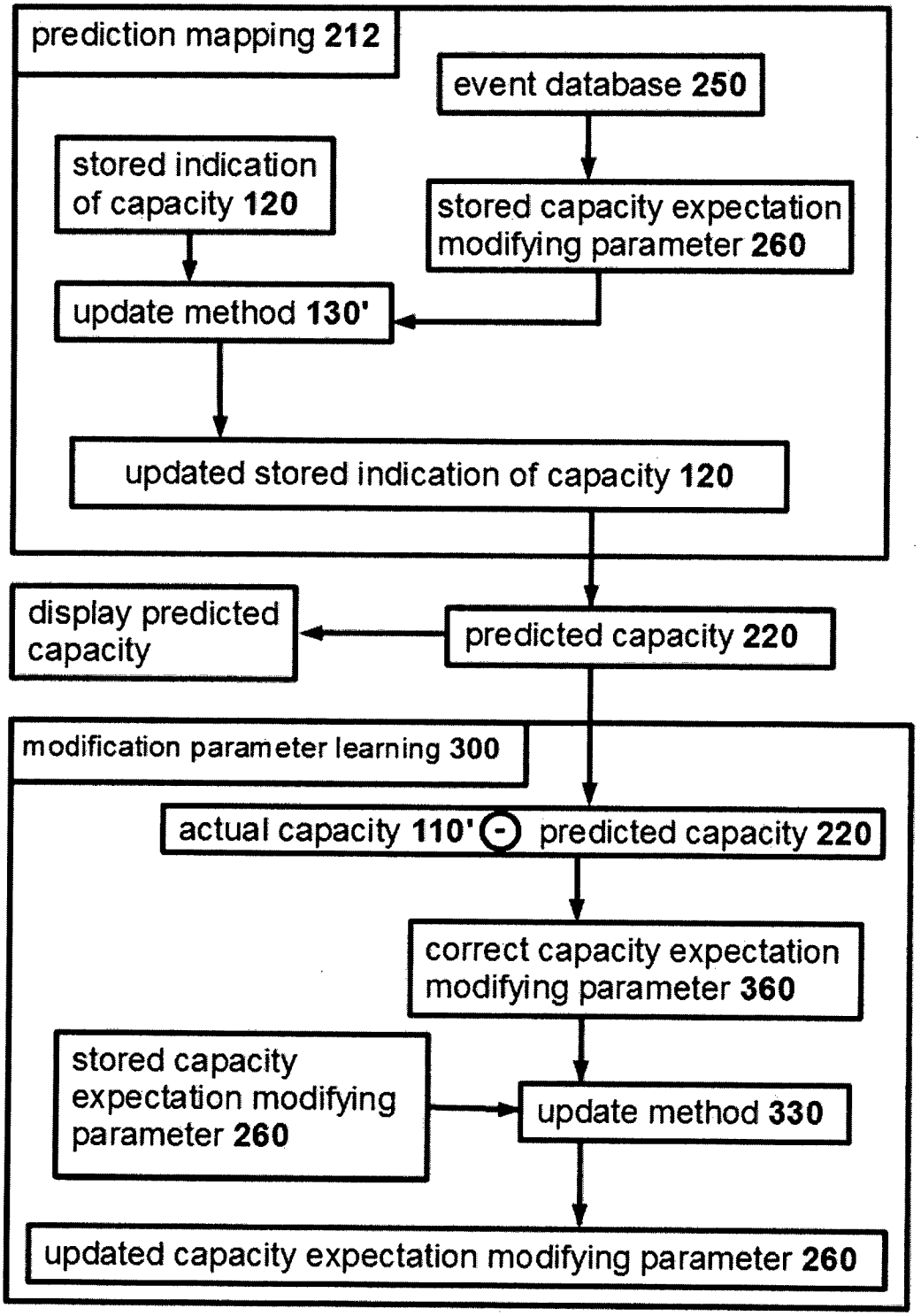

prediction mapping 212
event database 250
stored indication of capacity 120
stored capacity expectation modifying parameter 260
update method 130'
updated stored indication of capacity 120
display predicted capacity
predicted capacity 220
modification parameter learning 300
actual capacity 110'
predicted capacity 220
correct capacity expectation modifying parameter 360
stored capacity expectation modifying parameter 260
update method 330
updated capacity expectation modifying parameter 260

Fig. 11

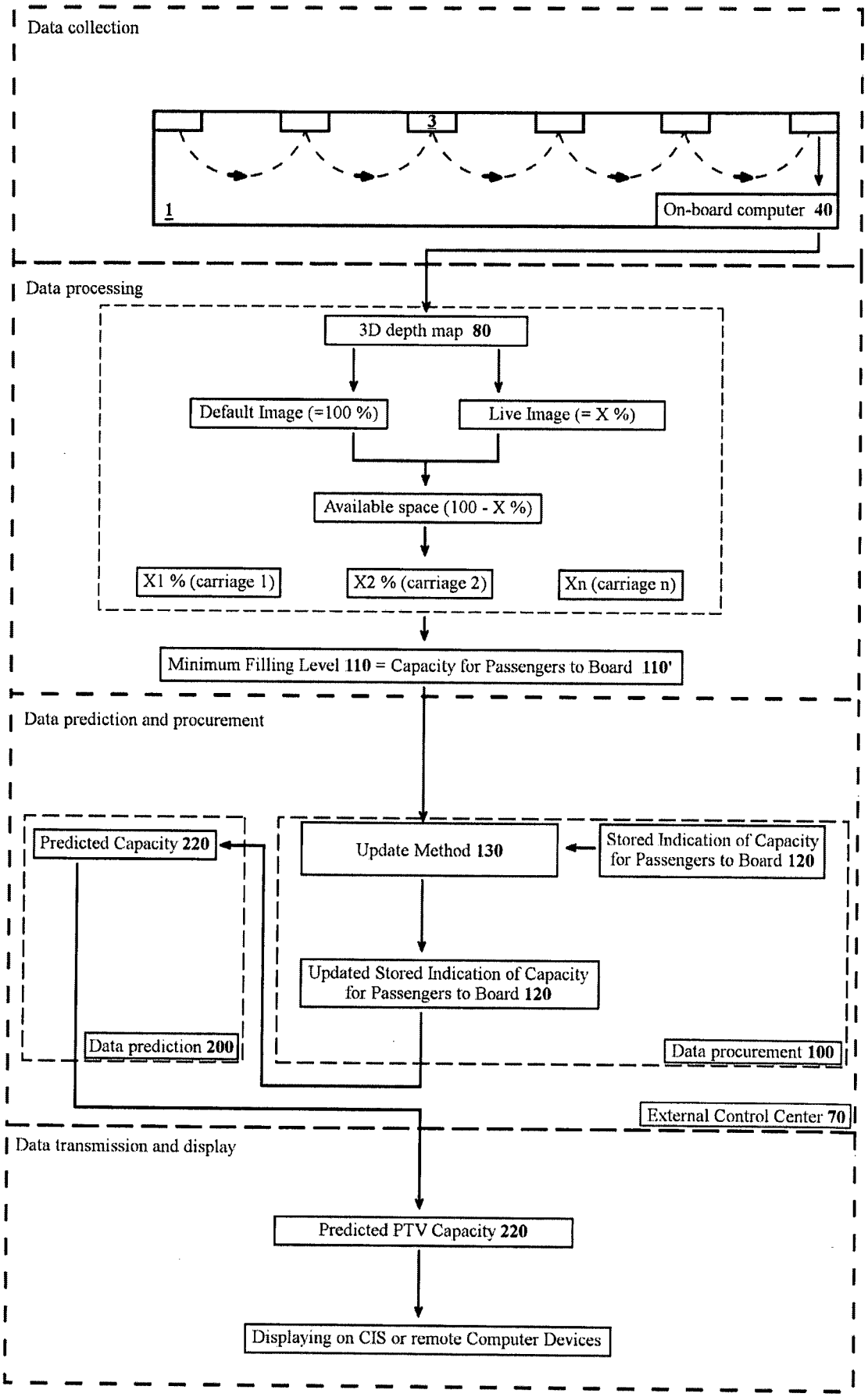

Data collection
3
1
On-board computer 40
Data processing
3D depth map 80
Default Image (=100 %)
Live Image (= X %)
Available space (100 - X %)
X1 % (carriage 1)
X2 % (carriage 2)
Xn (carriage n)
Minimum Filling Level 110 = Capacity for Passengers to Board 110'
Data prediction and procurement
Predicted Capacity 220
Update Method 130
Stored Indication of Capacity for Passengers to Board 120
Updated Stored Indication of Capacity for Passengers to Board 120
Data prediction 200
Data procurement 100
External Control Center 70
Data transmission and display
Predicted PTV Capacity 220
Displaying on CIS or remote Computer Devices

Fig. 12

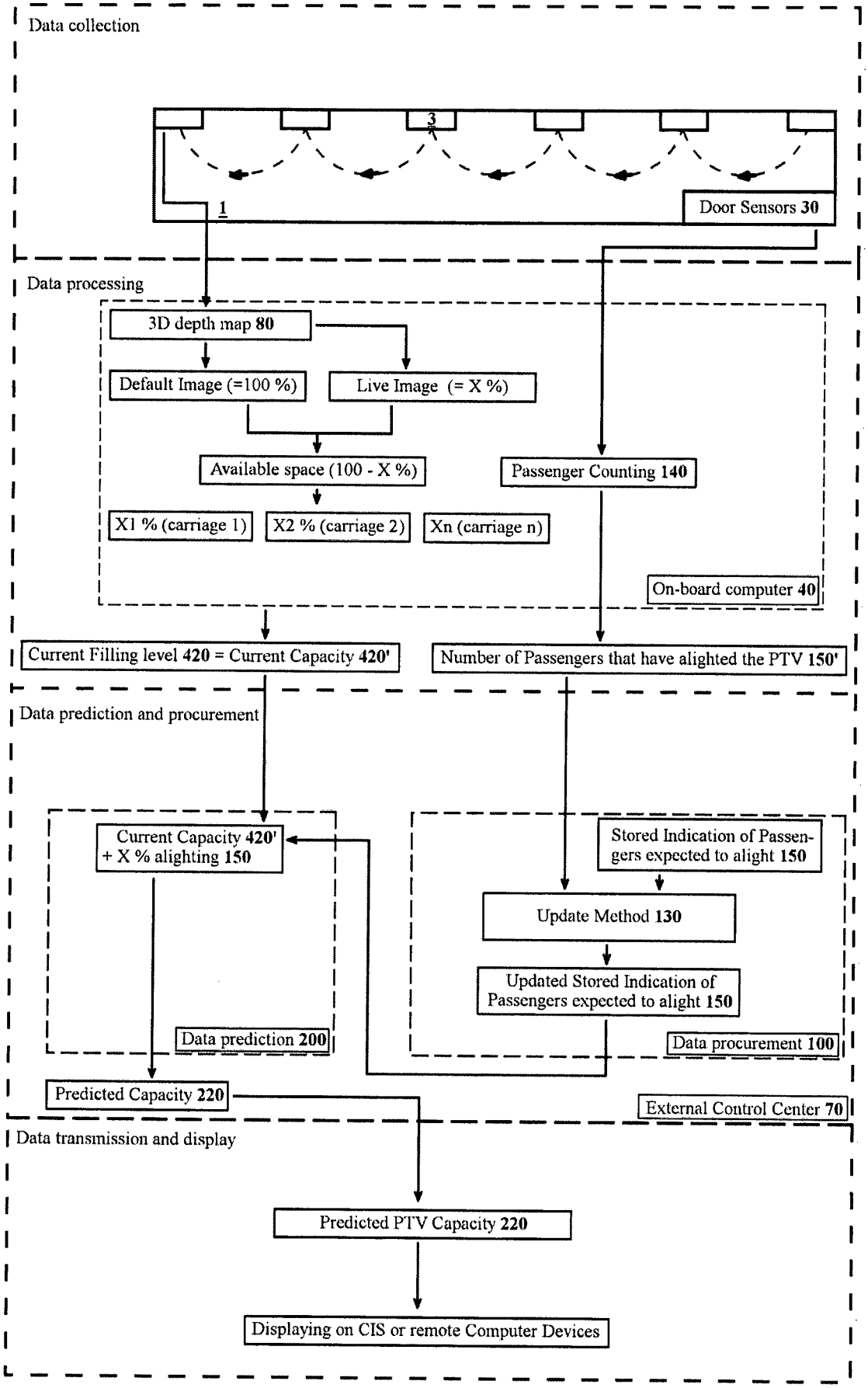

Data collection
3
1
Door Sensors 30
Data processing
3D depth map 80
Default Image (=100 %)
Live Image (= X %)
Available space (100 - X %)
Passenger Counting 140
X1 % (carriage 1)
X2 % (carriage 2)
Xn (carriage n)
On-board computer 40
Current Filling level 420 = Current Capacity 420'
Number of Passengers that have alighted the PTV 150'
Data prediction and procurement
Current Capacity 420' + X % alighting 150
Stored Indication of Passengers expected to alight 150
Update Method 130
Updated Stored Indication of Passengers expected to alight 150
Data prediction 200
Data procurement 100
Predicted Capacity 220
External Control Center 70
Data transmission and display
Predicted PTV Capacity 220
Displaying on CIS or remote Computer Devices

Fig. 13

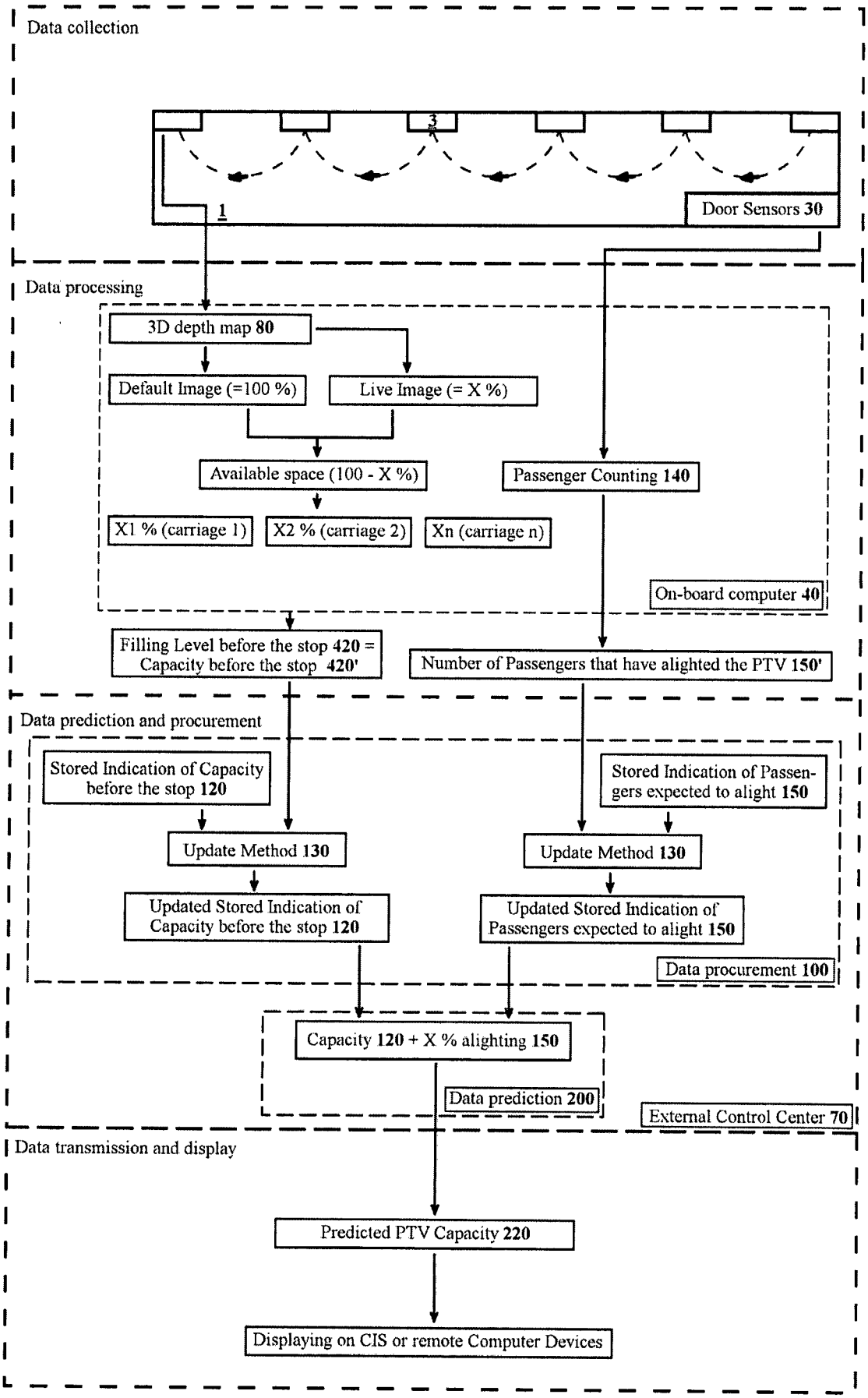

Data collection
3
1
Door Sensors 30
Data processing
3D depth map 80
Default Image (=100 %)
Live Image (= X %)
Available space (100 - X %)
Passenger Counting 140
X1 % (carriage 1)
X2 % (carriage 2)
Xn (carriage n)
On-board computer 40
Filling Level before the stop 420 = Capacity before the stop 420'
Number of Passengers that have alighted the PTV 150'
Data prediction and procurement
Stored Indication of Capacity before the stop 120
Stored Indication of Passengers expected to alight 150
Update Method 130
Update Method 130
Updated Stored Indication of Capacity before the stop 120
Updated Stored Indication of Passengers expected to alight 150
Data procurement 100
Capacity 120 + X % alighting 150
Data prediction 200
External Control Center 70
Data transmission and display
Predicted PTV Capacity 220
Displaying on CIS or remote Computer Devices

Fig. 14

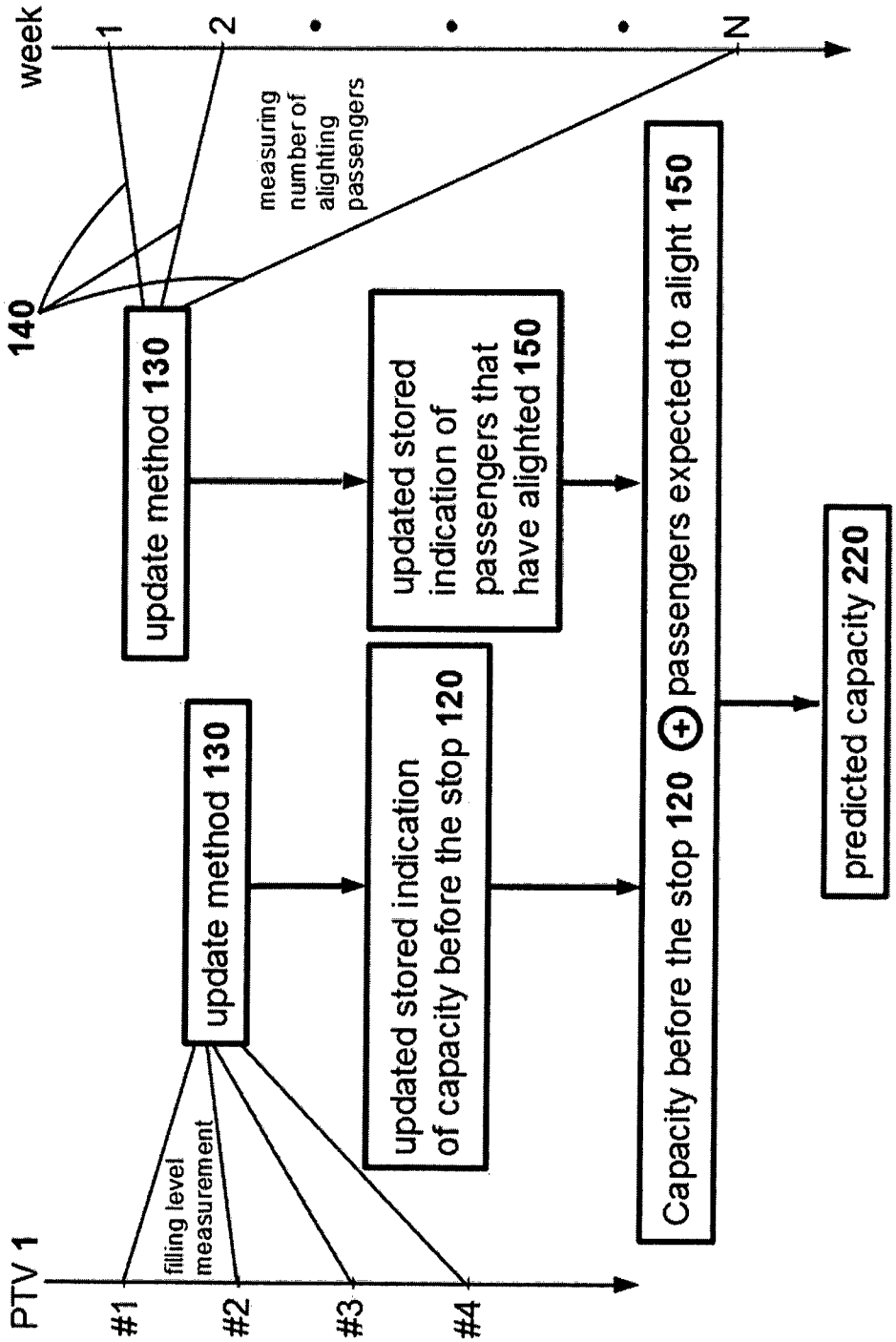

week
1
2
N
140
measuring number of alighting passengers
update method 130
updated stored indication of passengers that have alighted 150
update method 130
updated stored indication of capacity before the stop 120
Capacity before the stop 120 ⊕ passengers expected to alight 150
predicted capacity 220
PTV 1
filling level measurement
#1
#2
#3
#4

Fig. 15

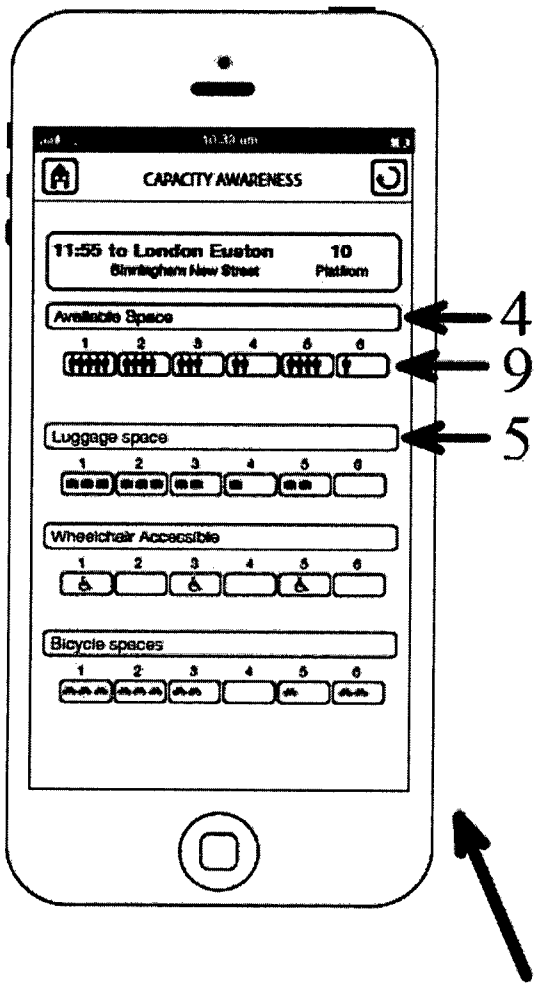

CAPACITY AWARENESS
11:55 to London Euston
10
Platform
Available Space
1 2 3 4 5 6
Luggage space
1 2 3 4 5 6
Wheelchair Accessible
1 2 3 4 5 6
Bicycle spaces
1 2 3 4 5 6
4
9
5
60

Fig. 17

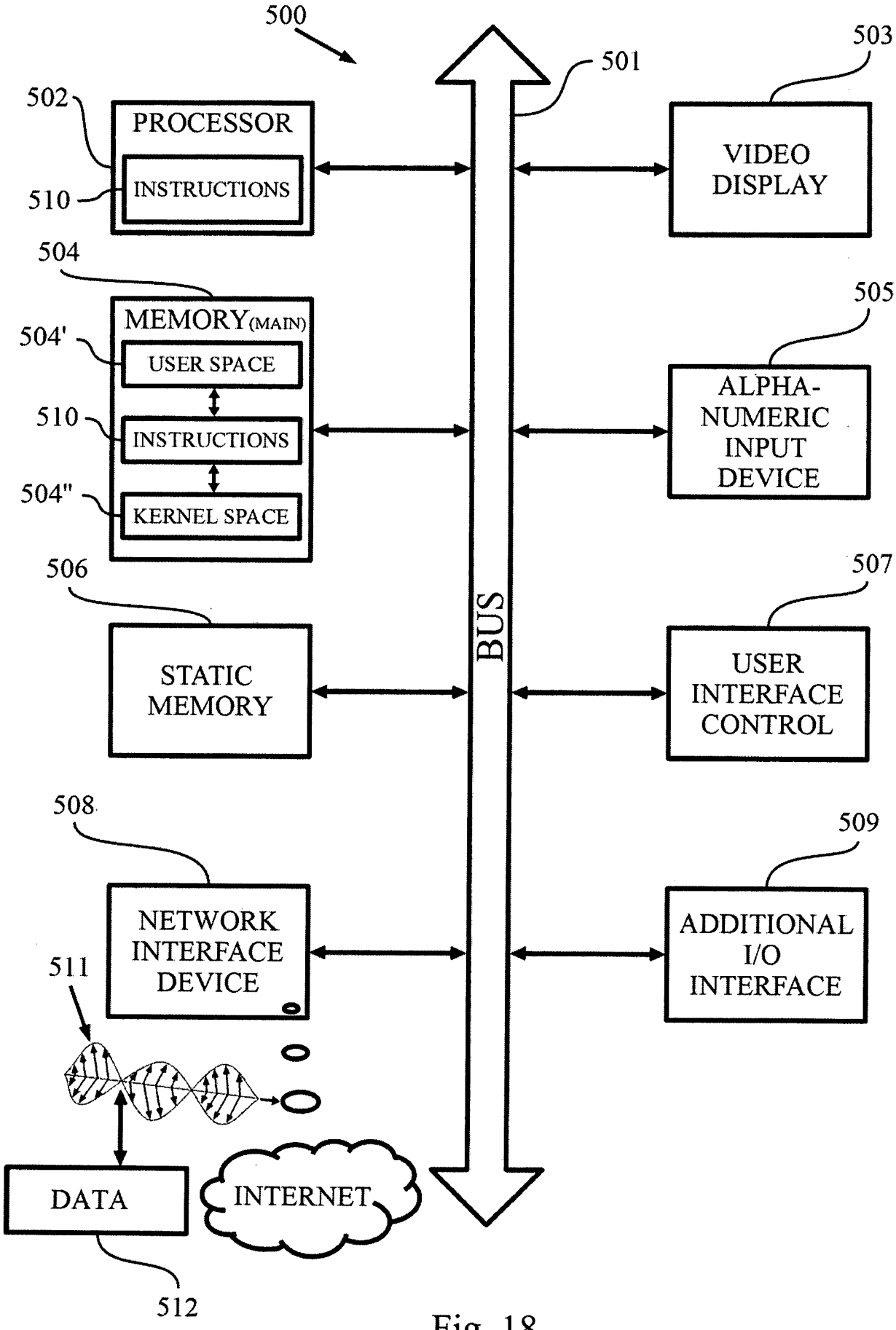

500
501
503
502
PROCESSOR
INSTRUCTIONS
510
VIDEO DISPLAY
504
MEMORY (MAIN)
504'
USER SPACE
505
510
INSTRUCTIONS
ALPHA-NUMERIC INPUT DEVICE
504"
KERNEL SPACE
506
507
STATIC MEMORY
BUS
USER INTERFACE CONTROL
508
509
NETWORK INTERFACE DEVICE
ADDITIONAL I/O INTERFACE
511
DATA
INTERNET
512

Fig. 18