FIG. 1

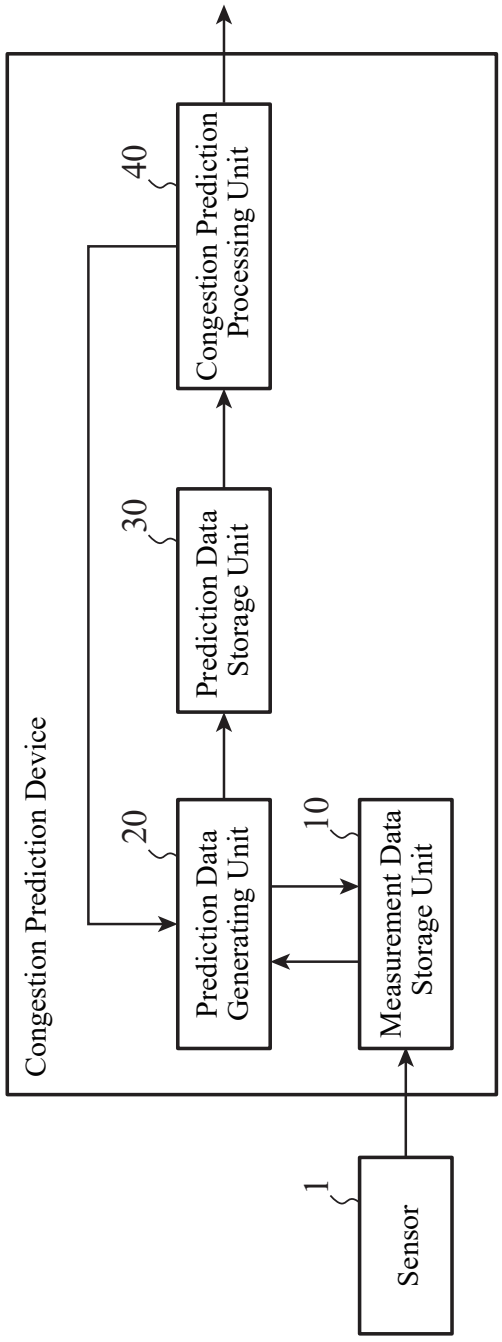

Congestion Prediction Device
Sensor
1
Measurement Data Storage Unit
10
Prediction Data Generating Unit
20
Prediction Data Storage Unit
30
Congestion Prediction Processing Unit
40

FIG. 2

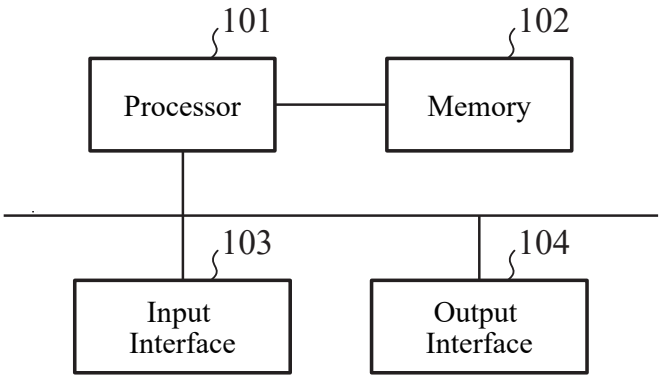

101
102
Processor
Memory
103
104
Input Interface
Output Interface

FIG. 3

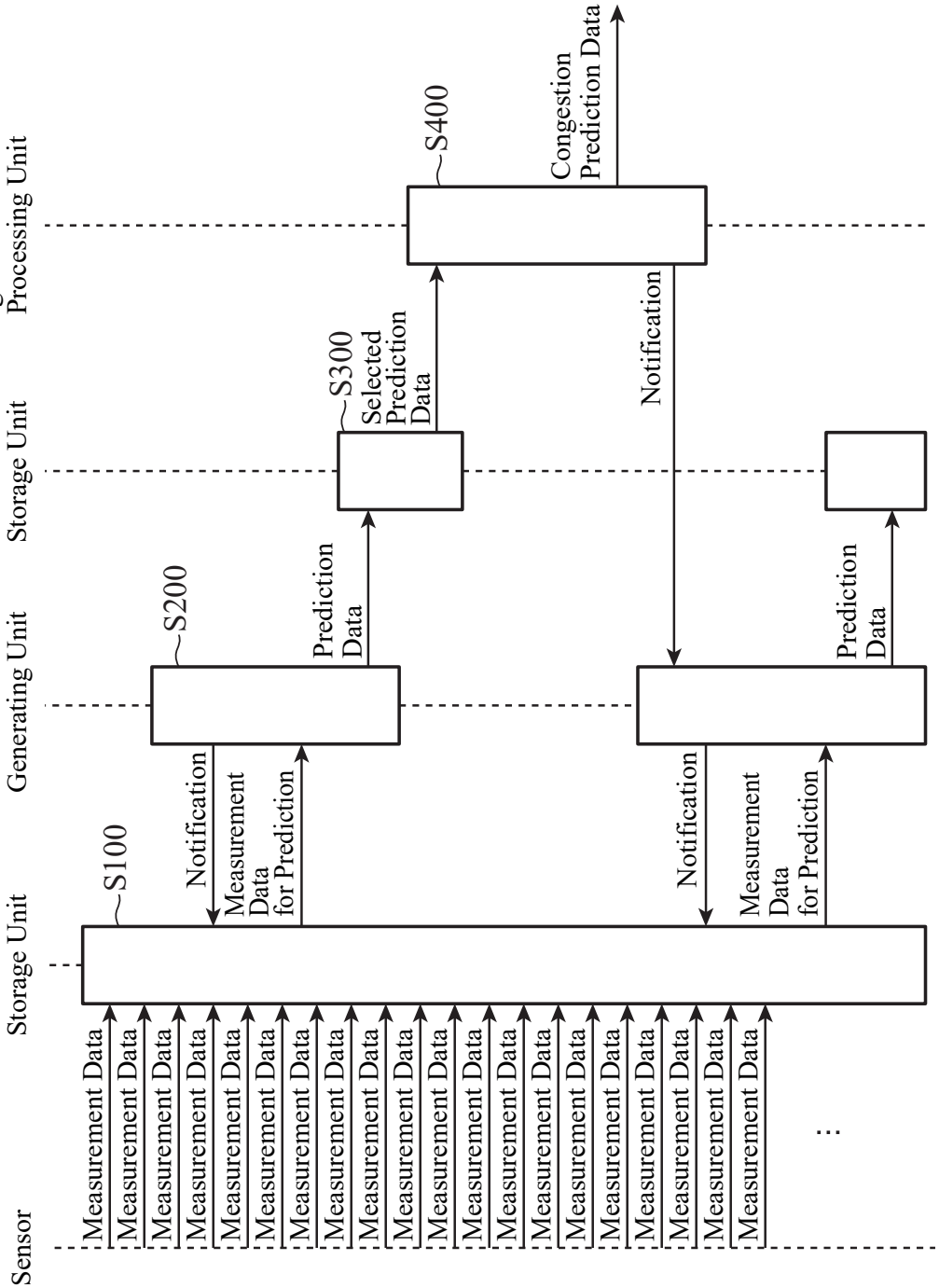

Sensor
Measurement Data Storage Unit
Prediction Data Generating Unit
Prediction Data Storage Unit
Congestion Prediction Processing Unit
Measurement Data
S100
Notification
Measurement Data for Prediction
S200
Prediction Data
S300
Selected Prediction Data
S400
Congestion Prediction Data
Notification
...

FIG. 4

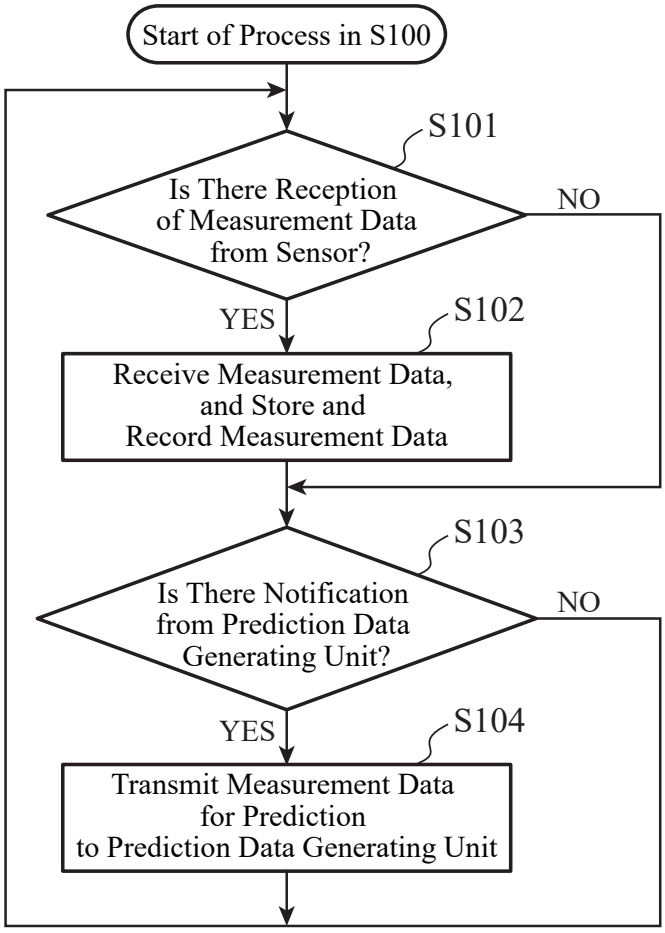

Start of Process in S100
S101
Is There Reception of Measurement Data from Sensor?
NO
YES
S102
Receive Measurement Data, and Store and Record Measurement Data
S103
Is There Notification from Prediction Data Generating Unit?
NO
YES
S104
Transmit Measurement Data for Prediction to Prediction Data Generating Unit

FIG. 5

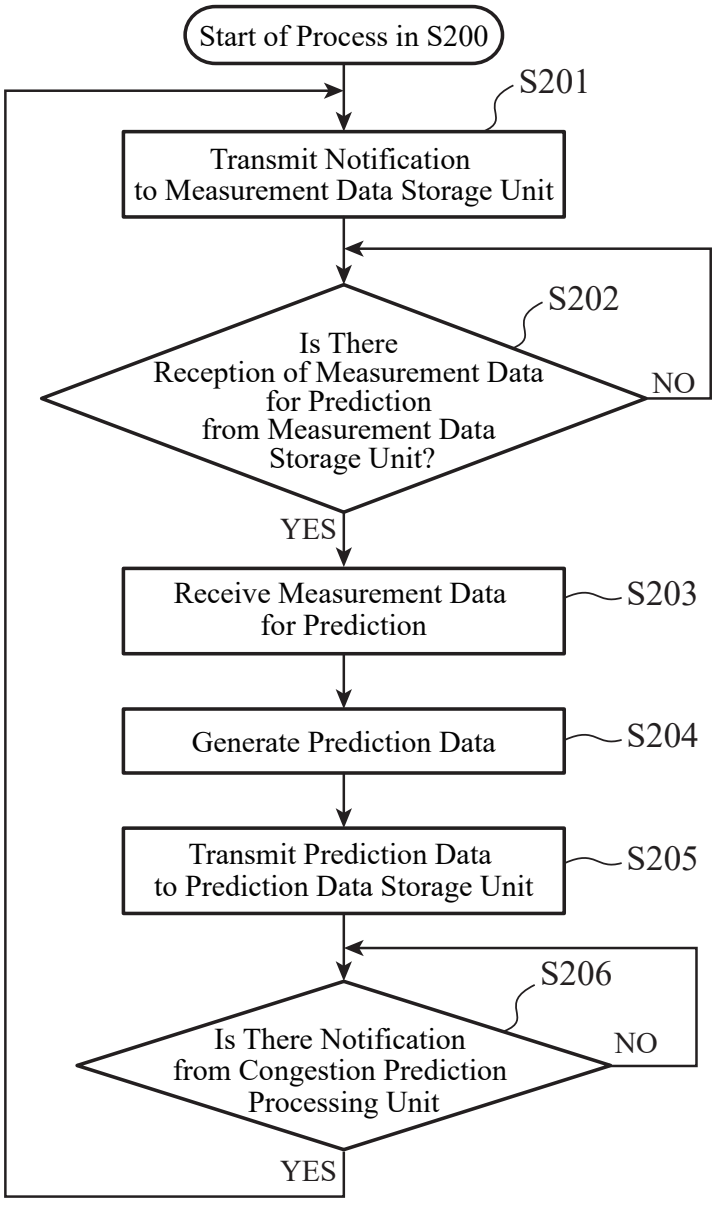

Start of Process in S200
S201
Transmit Notification to Measurement Data Storage Unit
S202
Is There Reception of Measurement Data for Prediction from Measurement Data Storage Unit?
NO
YES
Receive Measurement Data for Prediction
S203
Generate Prediction Data
S204
Transmit Prediction Data to Prediction Data Storage Unit
S205
S206
Is There Notification from Congestion Prediction Processing Unit
NO
YES

FIG. 6

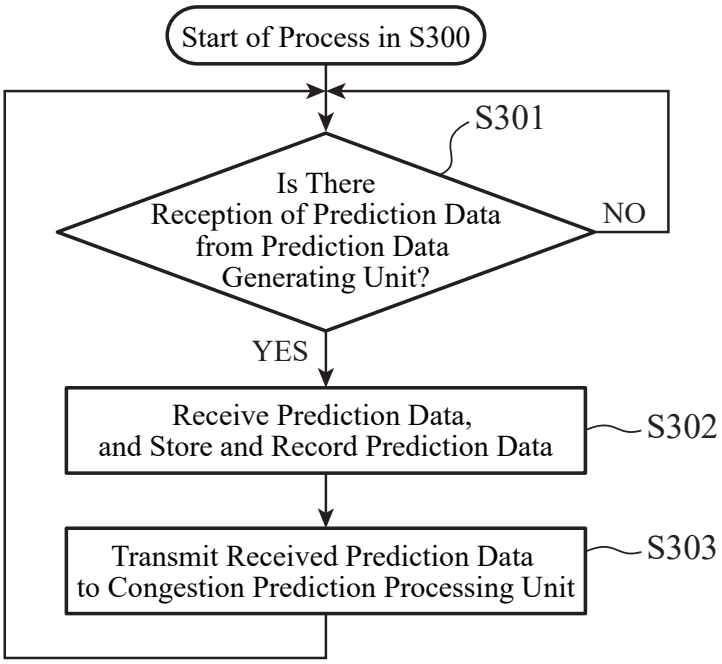

Start of Process in S300
S301
Is There Reception of Prediction Data from Prediction Data Generating Unit?
NO
YES
Receive Prediction Data, and Store and Record Prediction Data
S302
Transmit Received Prediction Data to Congestion Prediction Processing Unit
S303

FIG. 7

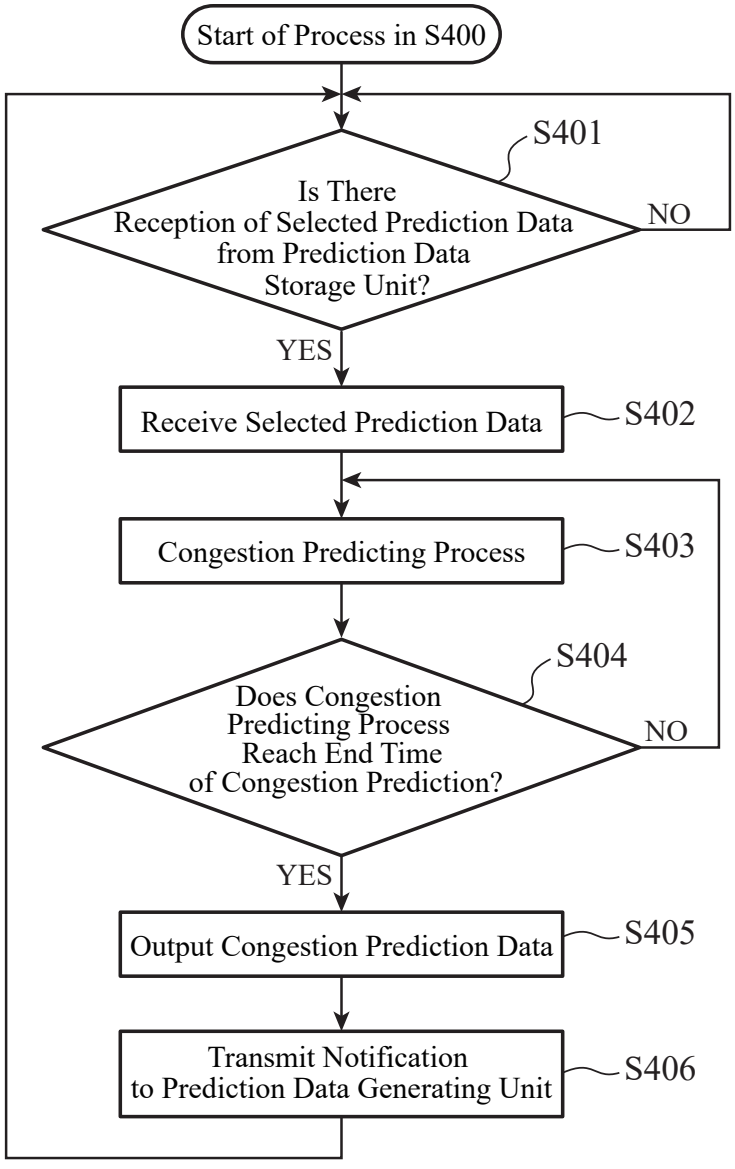

Start of Process in S400
S401
Is There Reception of Selected Prediction Data from Prediction Data Storage Unit?
NO
YES
Receive Selected Prediction Data
S402
Congestion Predicting Process
S403
S404
Does Congestion Predicting Process Reach End Time of Congestion Prediction?
NO
YES
Output Congestion Prediction Data
S405
Transmit Notification to Prediction Data Generating Unit
S406

FIG. 8

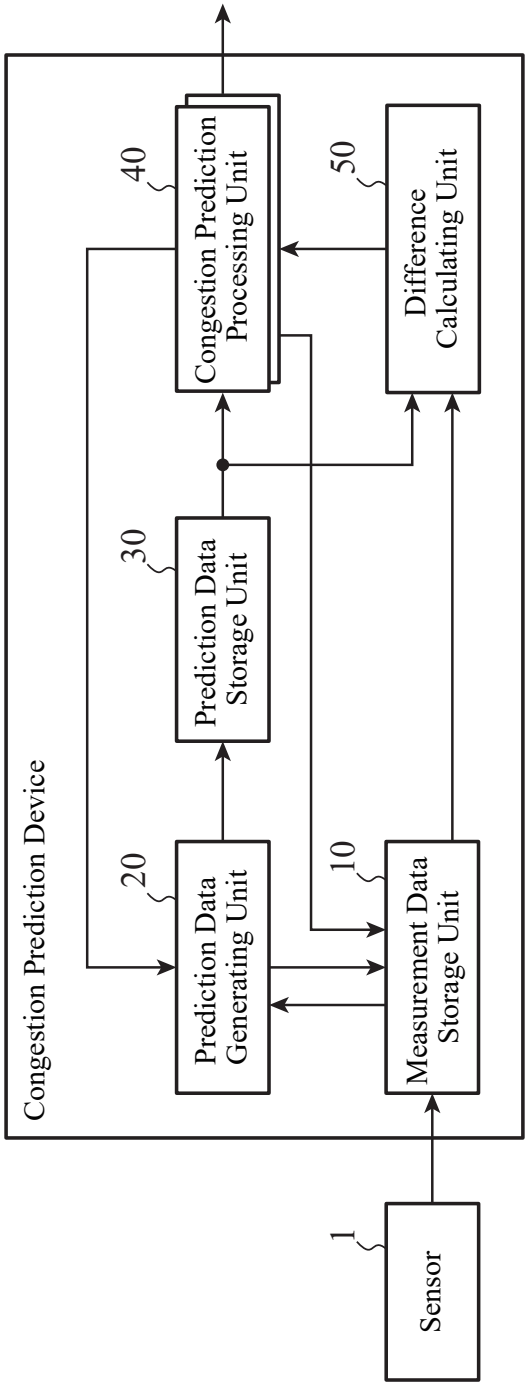

Congestion Prediction Device
Sensor
1
Measurement Data Storage Unit
10
Prediction Data Generating Unit
20
Prediction Data Storage Unit
30
Congestion Prediction Processing Unit
40
Difference Calculating Unit
50

FIG. 9

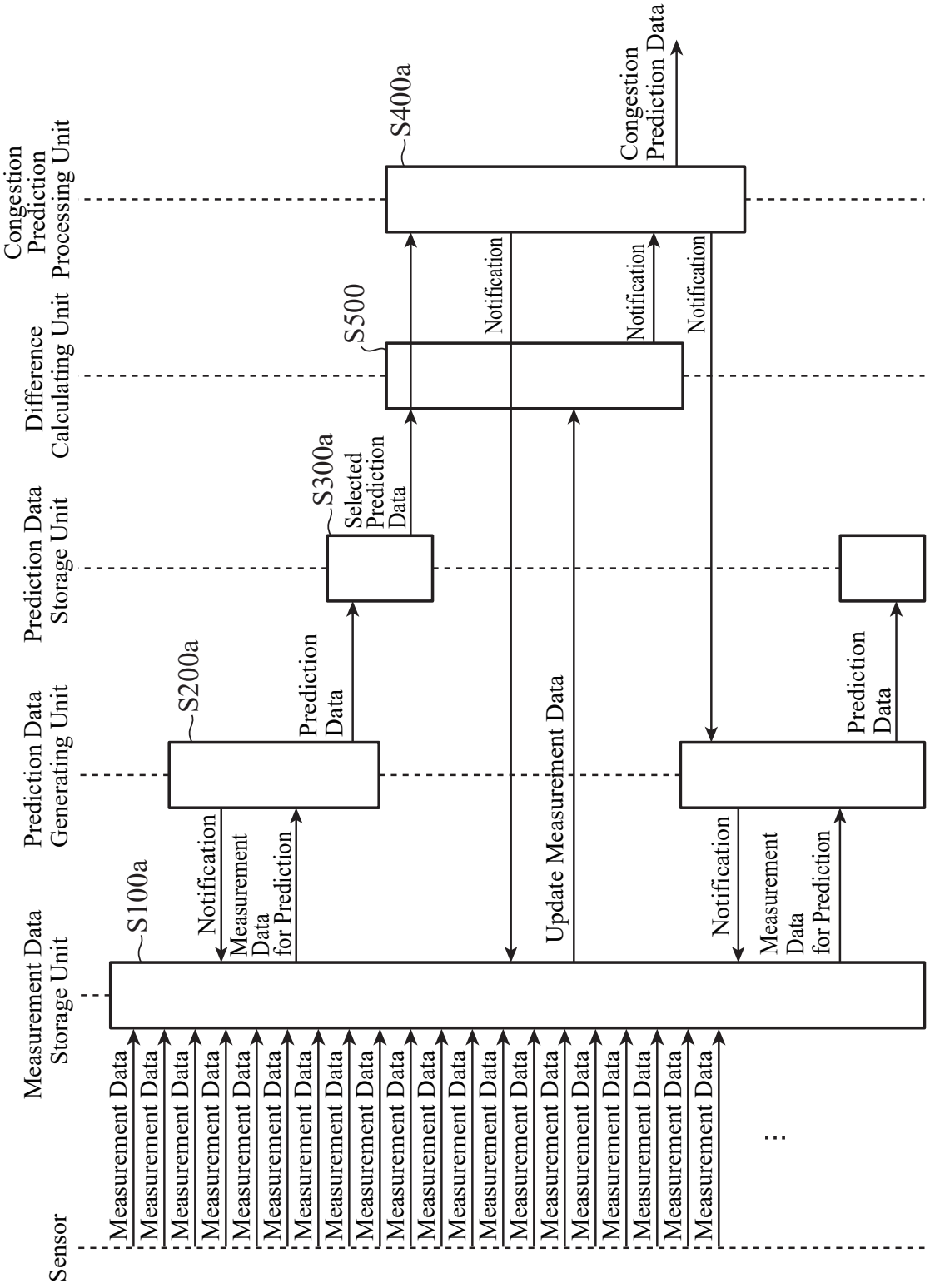

Sensor
Measurement Data Storage Unit
Prediction Data Generating Unit
Prediction Data Storage Unit
Difference Calculating Unit
Congestion Prediction Processing Unit
S100a
S200a
S300a
S400a
S500
Measurement Data
Notification
Measurement Data for Prediction
Prediction Data
Selected Prediction Data
Update Measurement Data
Congestion Prediction Data
...

FIG. 10

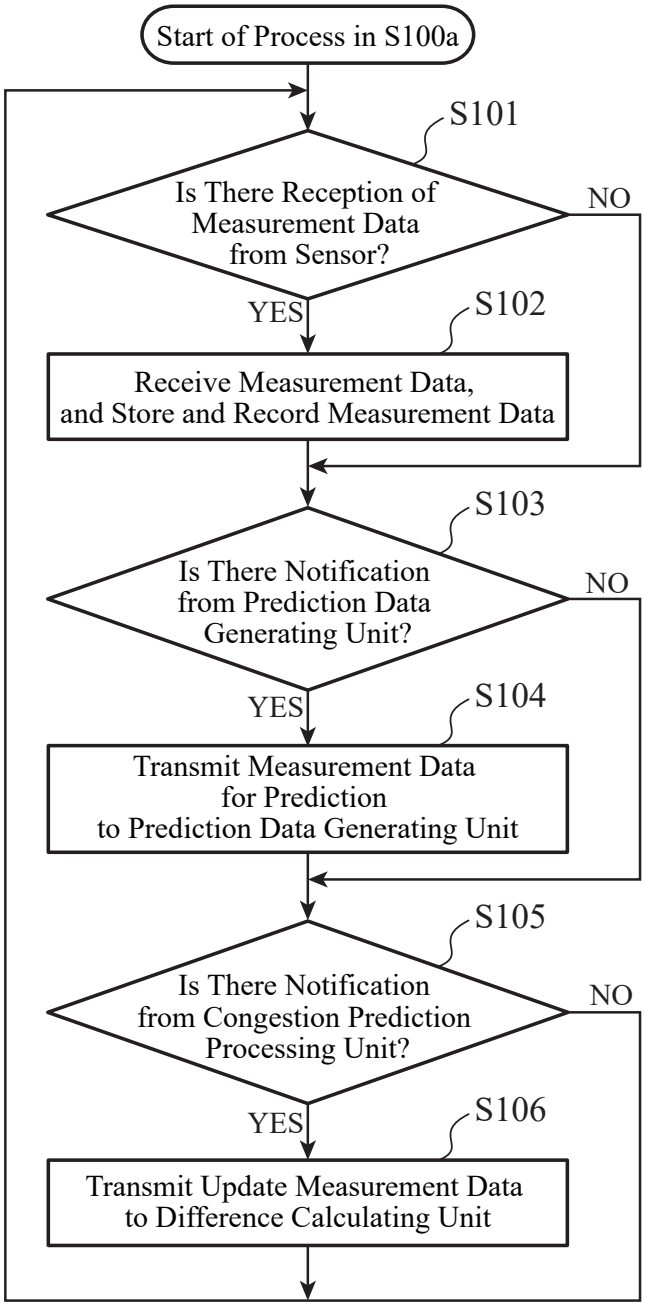

Start of Process in S100a
S101
Is There Reception of Measurement Data from Sensor?
NO
YES
S102
Receive Measurement Data, and Store and Record Measurement Data
S103
Is There Notification from Prediction Data Generating Unit?
NO
YES
S104
Transmit Measurement Data for Prediction to Prediction Data Generating Unit
S105
Is There Notification from Congestion Prediction Processing Unit?
NO
YES
S106
Transmit Update Measurement Data to Difference Calculating Unit

FIG. 11

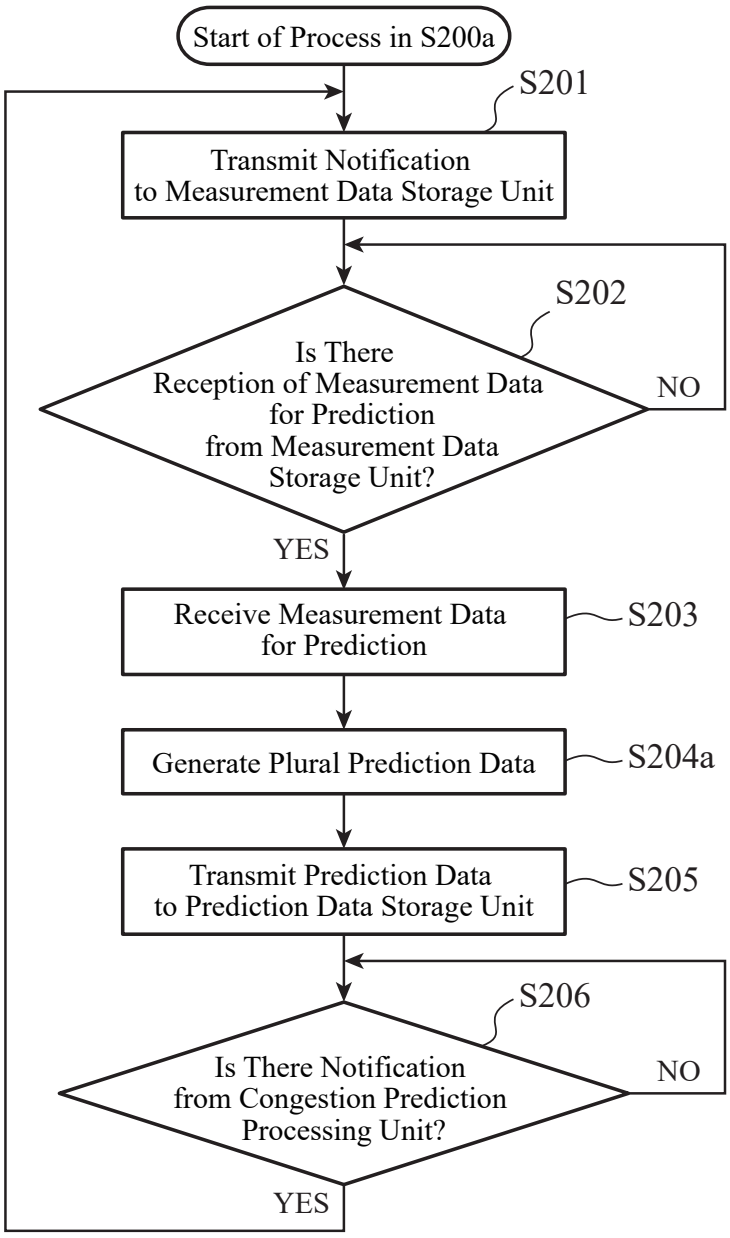

Start of Process in S200a
S201
Transmit Notification to Measurement Data Storage Unit
S202
Is There Reception of Measurement Data for Prediction from Measurement Data Storage Unit?
NO
YES
Receive Measurement Data for Prediction
S203
Generate Plural Prediction Data
S204a
Transmit Prediction Data to Prediction Data Storage Unit
S205
S206
Is There Notification from Congestion Prediction Processing Unit?
NO
YES

FIG. 12

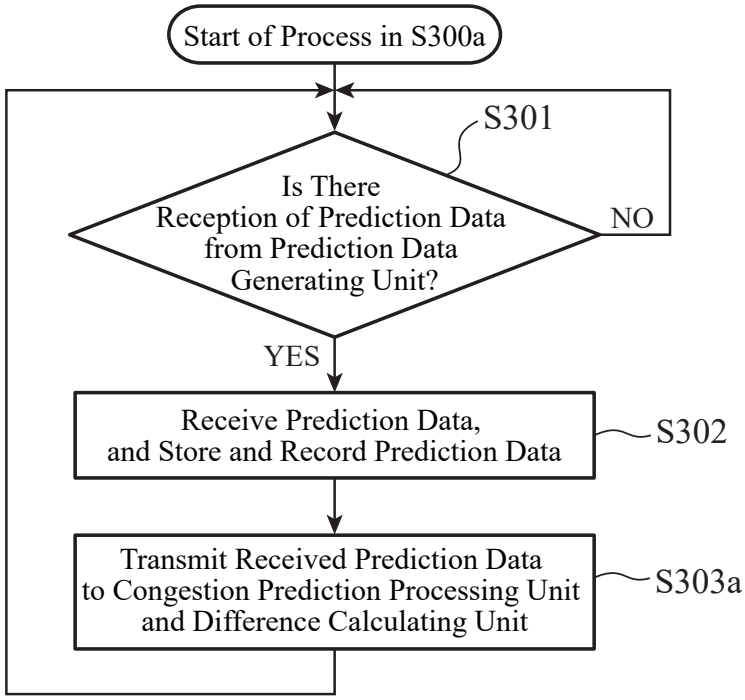

Start of Process in S300a
S301
Is There Reception of Prediction Data from Prediction Data Generating Unit?
NO
YES
Receive Prediction Data, and Store and Record Prediction Data
S302
Transmit Received Prediction Data to Congestion Prediction Processing Unit and Difference Calculating Unit
S303a

FIG. 13

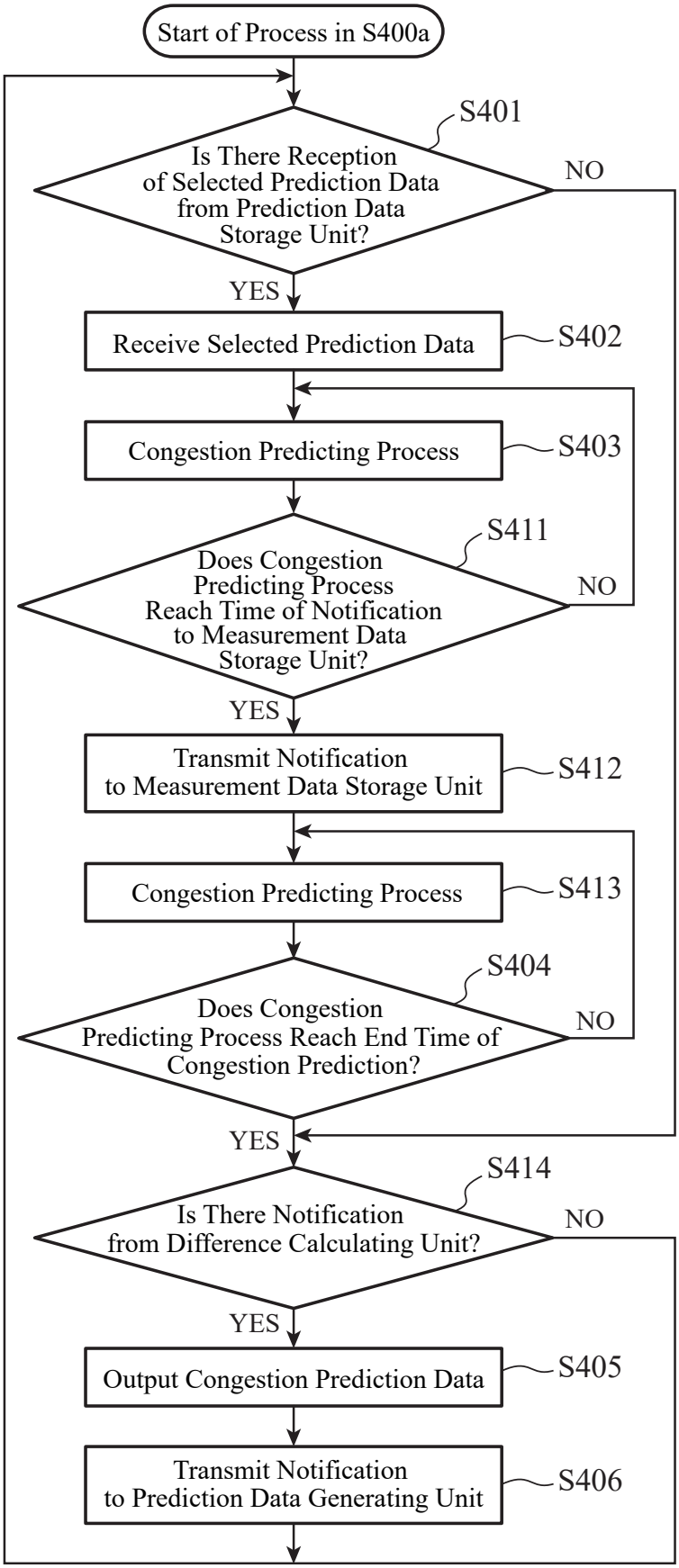
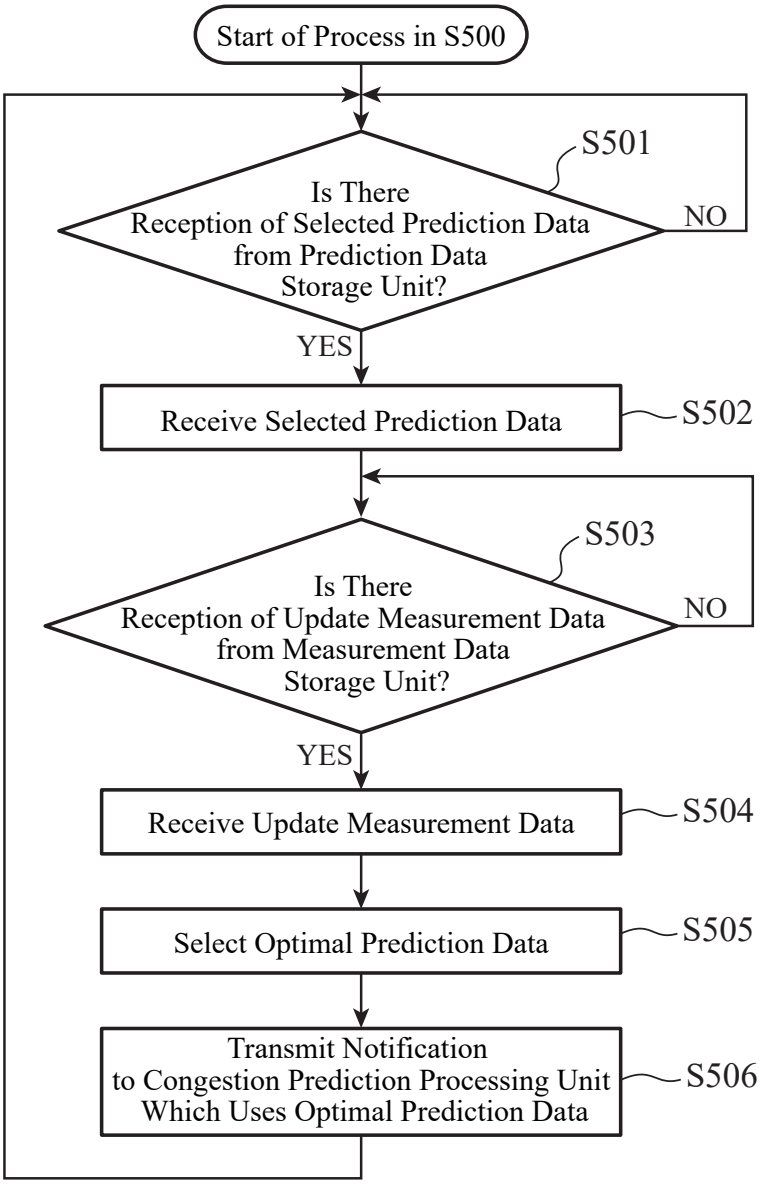

Start of Process in S400a
S401
Is There Reception of Selected Prediction Data from Prediction Data Storage Unit?
NO
YES
Receive Selected Prediction Data
S402
Congestion Predicting Process
S403
S411
Does Congestion Predicting Process Reach Time of Notification to Measurement Data Storage Unit?
NO
YES
Transmit Notification to Measurement Data Storage Unit
S412
Congestion Predicting Process
S413
S404
Does Congestion Predicting Process Reach End Time of Congestion Prediction?
NO
YES
S414
Is There Notification from Difference Calculating Unit?
NO
YES
Output Congestion Prediction Data
S405
Transmit Notification to Prediction Data Generating Unit
S406

FIG. 14


Start of Process in S500
S501
Is There Reception of Selected Prediction Data from Prediction Data Storage Unit?
NO
YES
Receive Selected Prediction Data
S502
S503
Is There Reception of Update Measurement Data from Measurement Data Storage Unit?
NO
YES
Receive Update Measurement Data
S504
Select Optimal Prediction Data
S505
Transmit Notification to Congestion Prediction Processing Unit Which Uses Optimal Prediction Data
S506