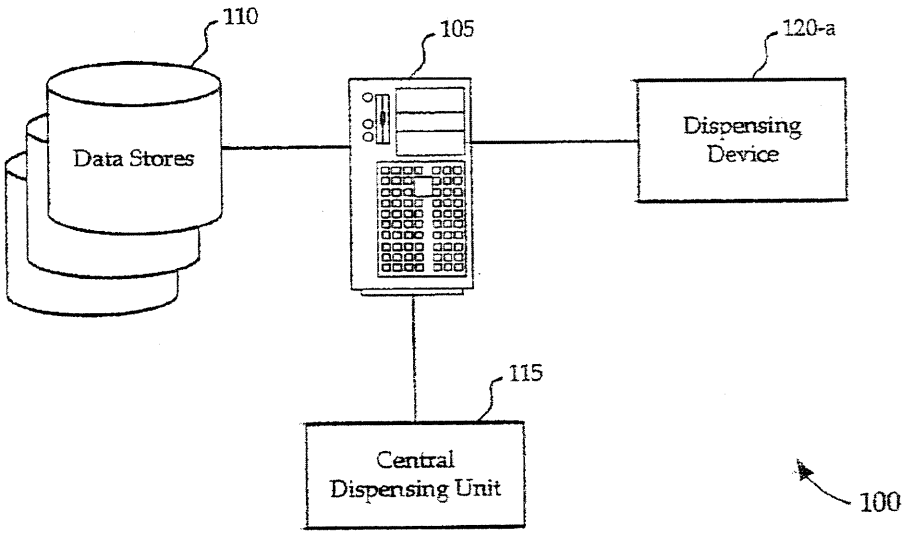

110
105
120-a
Data Stores
Dispensing Device
115
Central Dispensing Unit
100

FIG. 1A

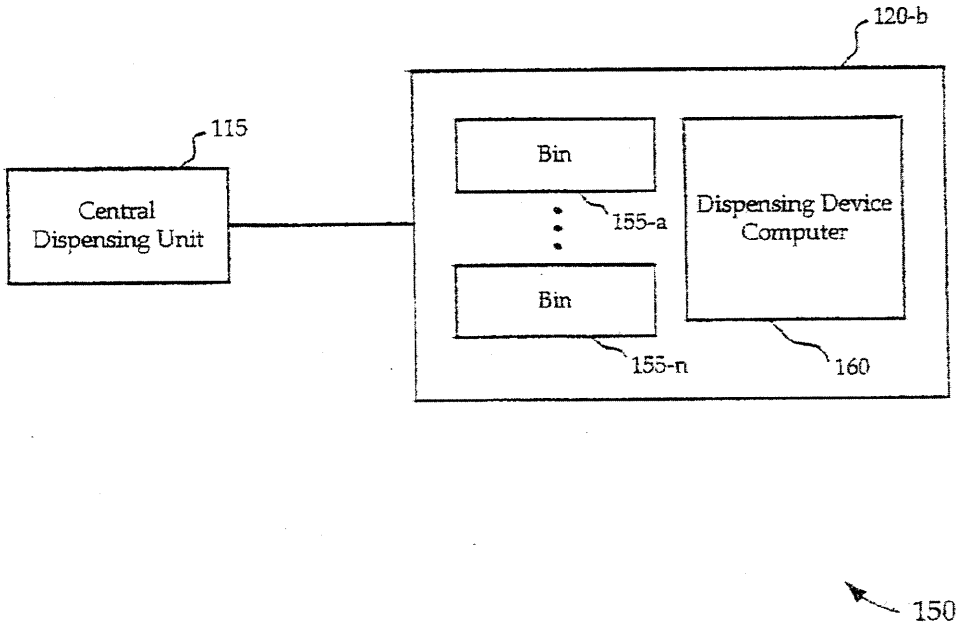

120-b
115
Central Dispensing Unit
Bin
155-a
Bin
155-n
Dispensing Device Computer
160
150

FIG. 1B

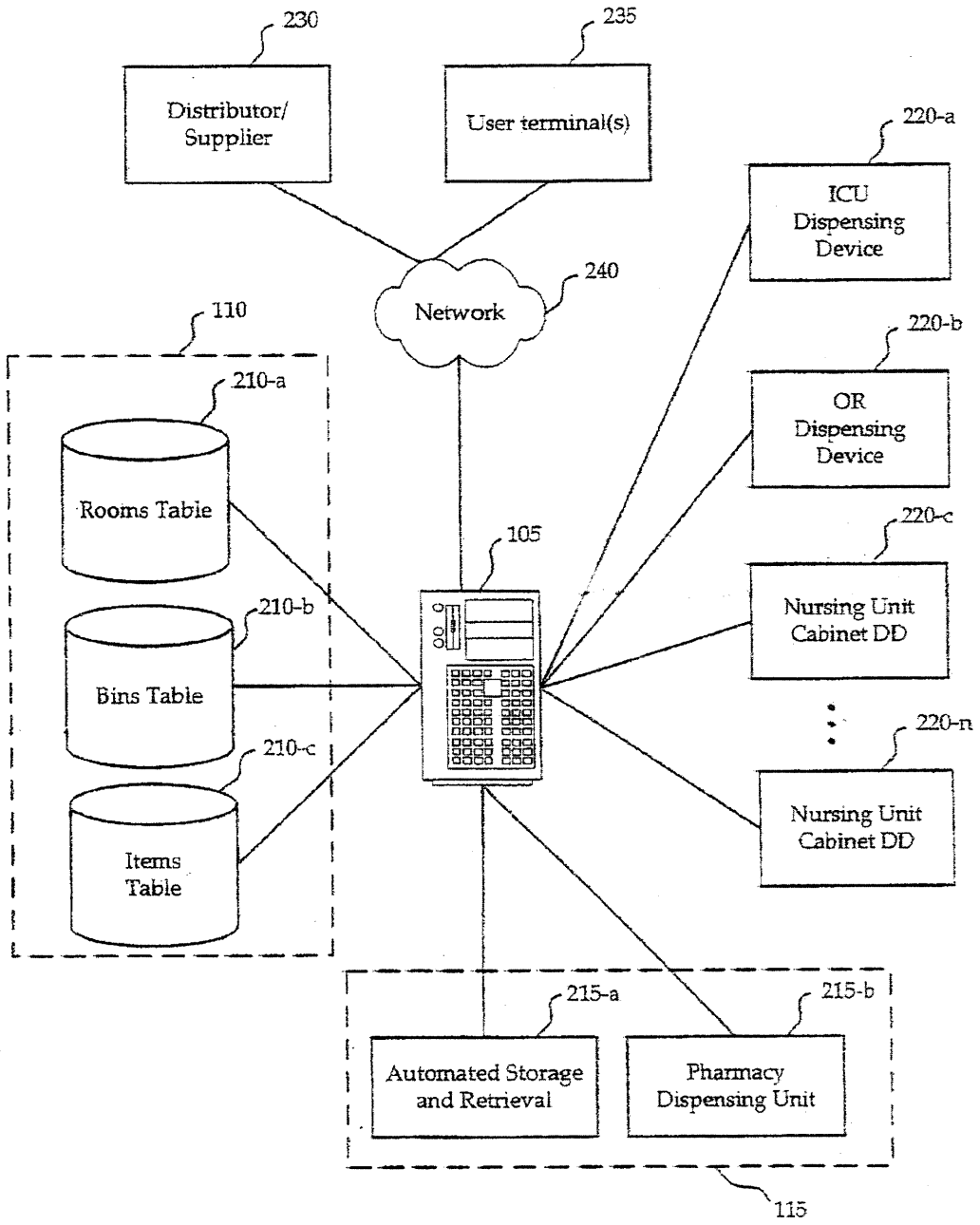
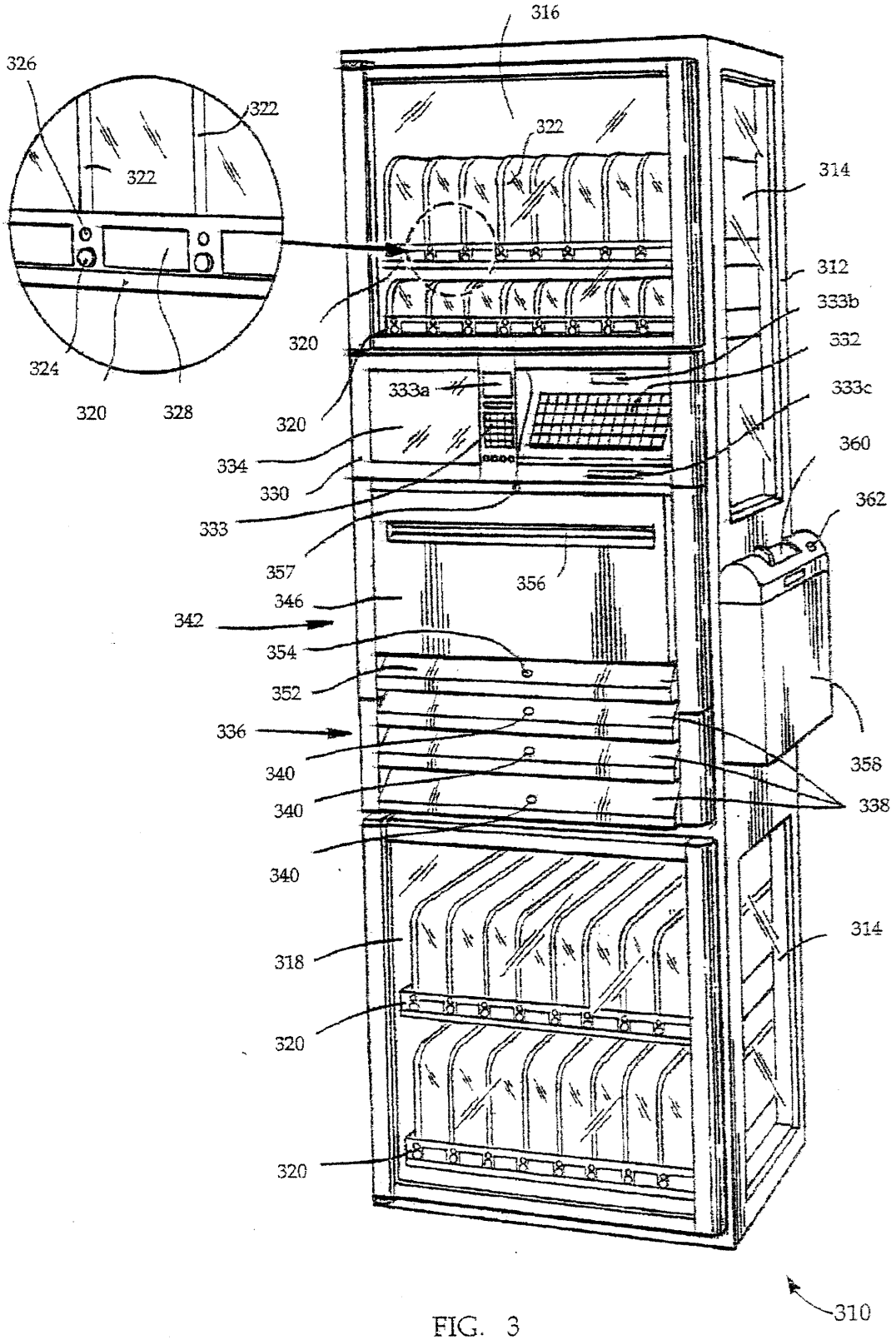
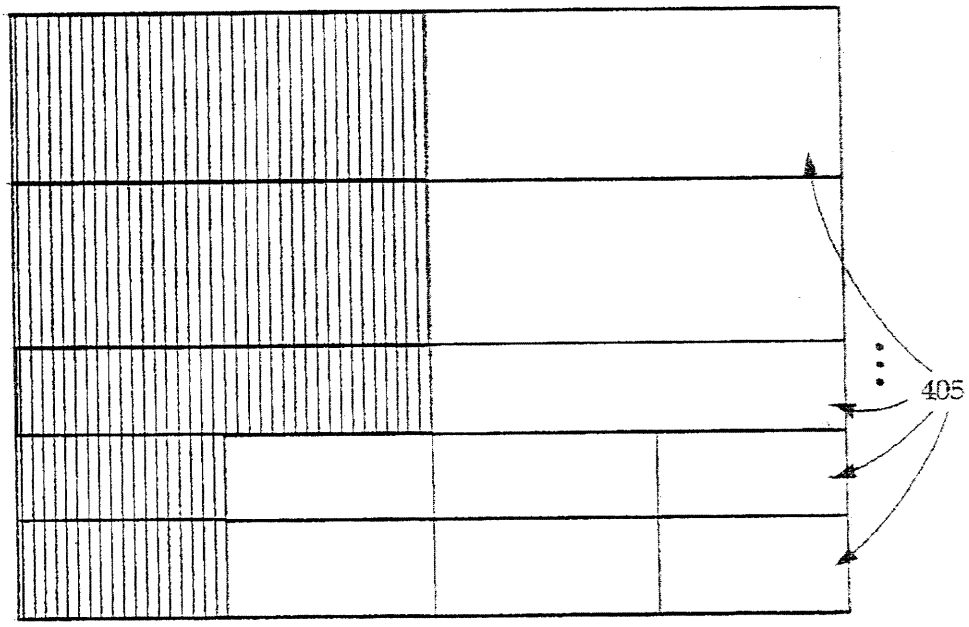

230
Distributor/
Supplier
235
User terminal(s)
220-a
ICU
Dispensing
Device
240
Network
110
220-b
OR
Dispensing
Device
210-a
Rooms Table
105
220-c
Nursing Unit
Cabinet DD
210-b
Bins Table
220-n
210-c
Items
Table
Nursing Unit
Cabinet DD
215-a
215-b
Automated Storage
and Retrieval
Pharmacy
Dispensing Unit
115
200

FIG. 2


316
326
322
322
322
314
312
333b
332
320
333a
333c
320
360
334
330
362
333
357
356
346
342
354
352
336
340
358
340
338
340
314
318
320
320

310

FIG. 3



410 Item Specific Bins

415 Patient Specific Bins

338

FIG. 4

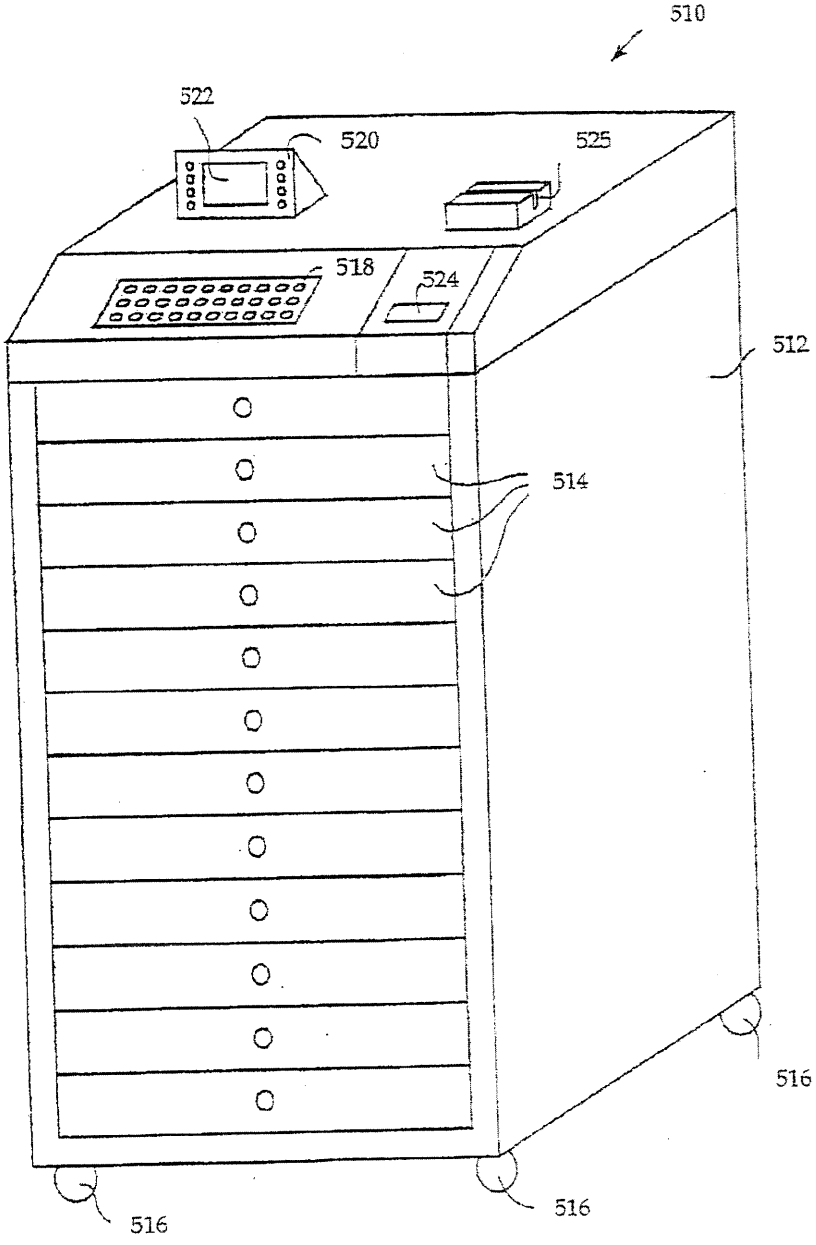


FIG. 5

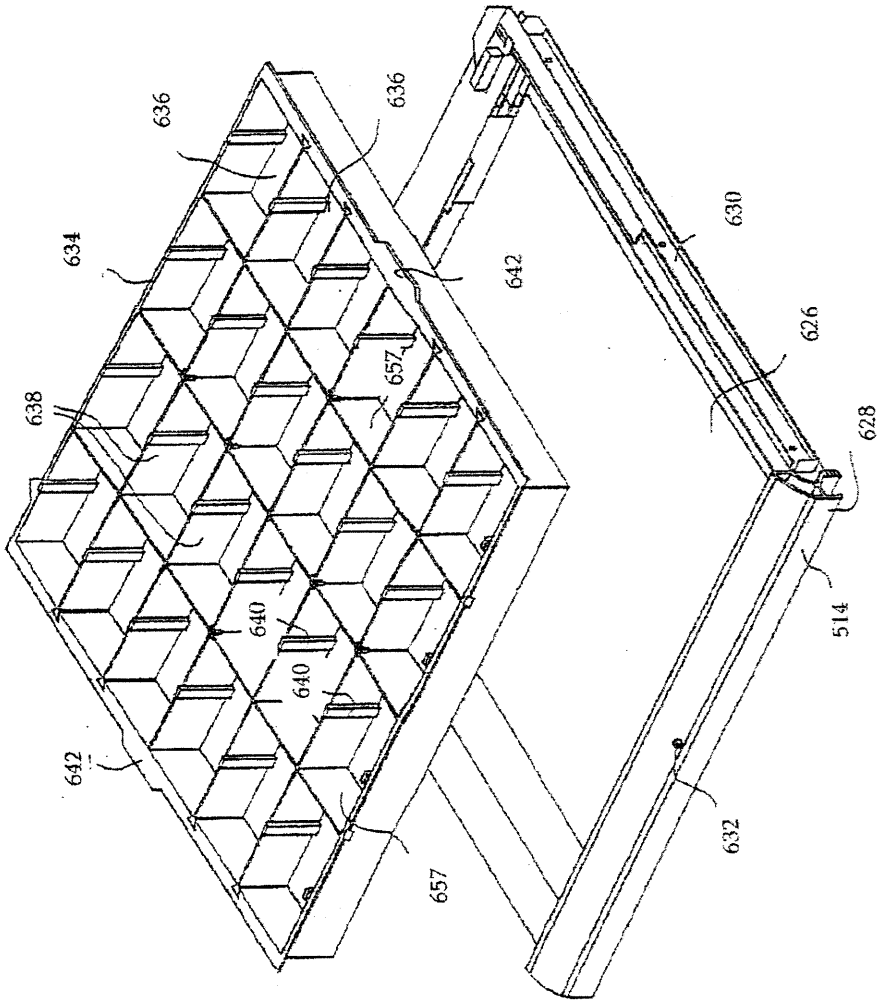


FIG. 6

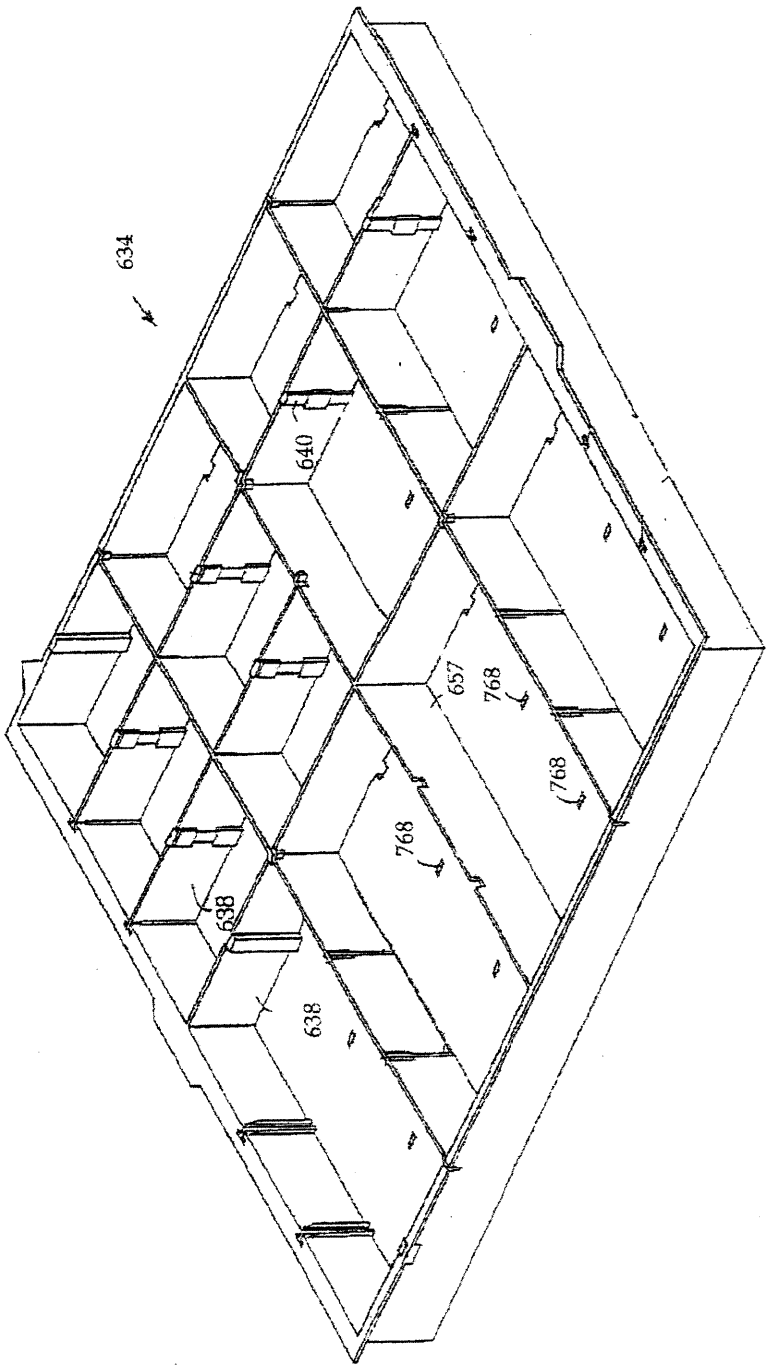


FIG. 7

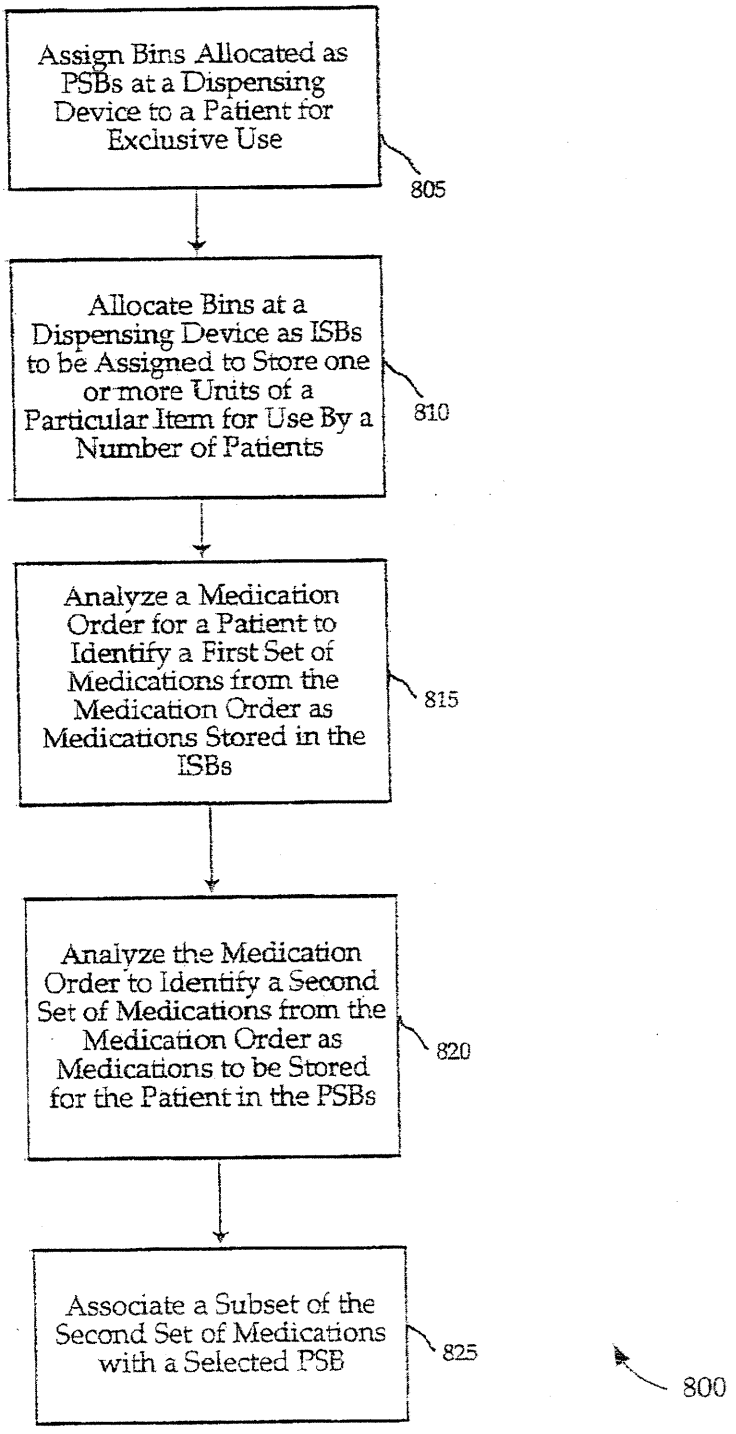

Assign Bins Allocated as PSBs at a Dispensing Device to a Patient for Exclusive Use
805
Allocate Bins at a Dispensing Device as ISBs to be Assigned to Store one or more Units of a Particular Item for Use By a Number of Patients
810
Analyze a Medication Order for a Patient to Identify a First Set of Medications from the Medication Order as Medications Stored in the ISBs
815
Analyze the Medication Order to Identify a Second Set of Medications from the Medication Order as Medications to be Stored for the Patient in the PSBs
820
Associate a Subset of the Second Set of Medications with a Selected PSB
825
800

FIG. 8

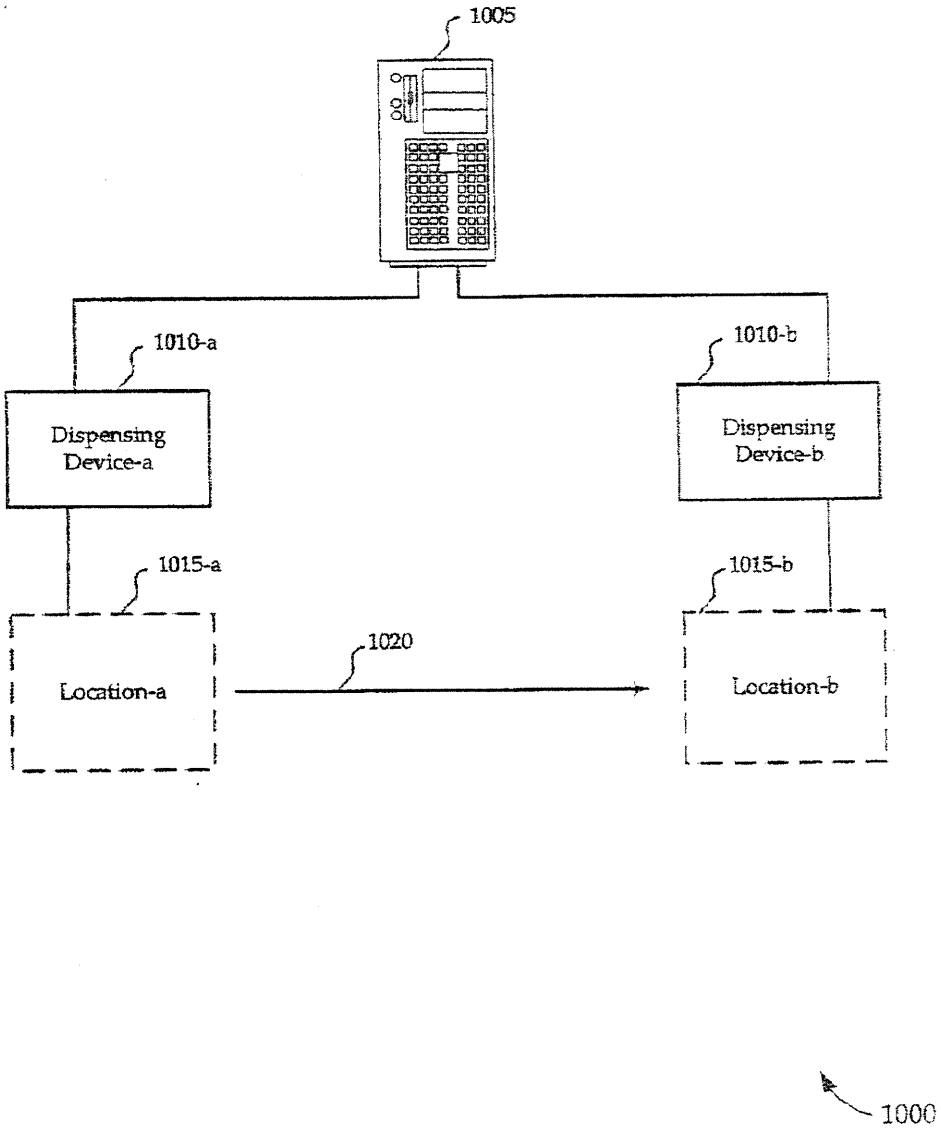

1005
1010-a
1010-b
Dispensing Device-a
Dispensing Device-b
1015-a
1015-b
1020
Location-a
Location-b
1000

FIG. 9

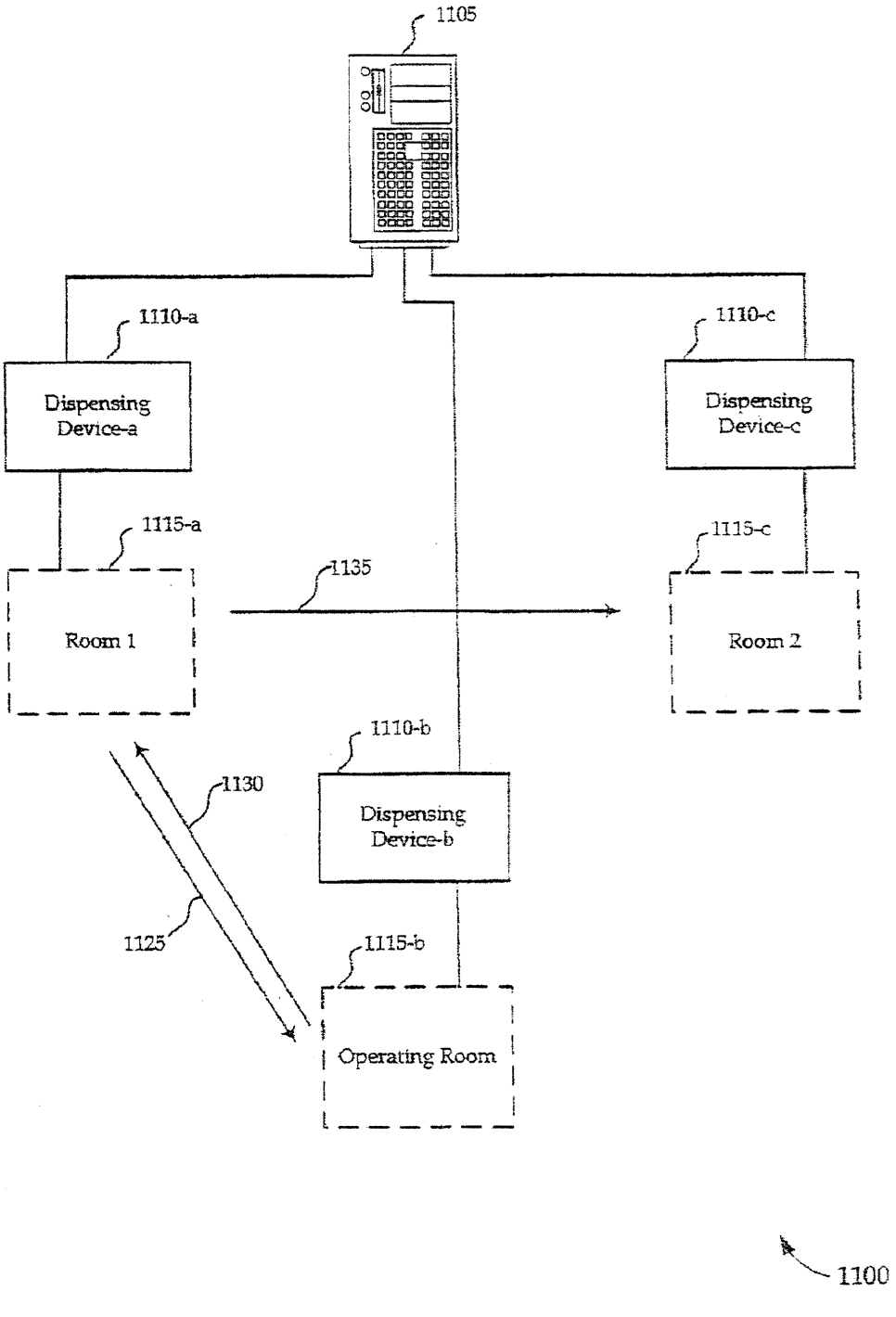

1105
1110-a
Dispensing Device-a
1110-c
Dispensing Device-c
1115-a
Room 1
1135
1115-c
Room 2
1110-b
1130
Dispensing Device-b
1125
1115-b
Operating Room
1100

FIG. 10

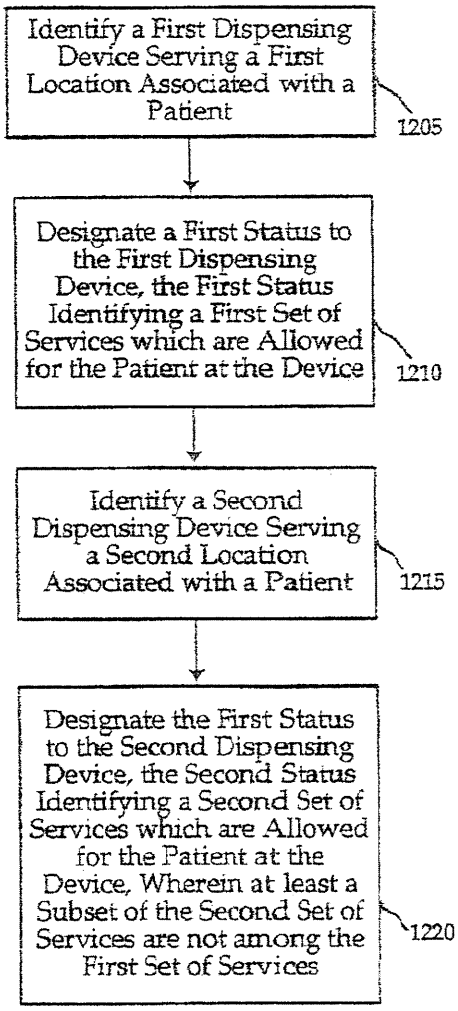

Identify a First Dispensing Device Serving a First Location Associated with a Patient
1205
Designate a First Status to the First Dispensing Device, the First Status Identifying a First Set of Services which are Allowed for the Patient at the Device
1210
Identify a Second Dispensing Device Serving a Second Location Associated with a Patient
1215
Designate the First Status to the Second Dispensing Device, the Second Status Identifying a Second Set of Services which are Allowed for the Patient at the Device, Wherein at least a Subset of the Second Set of Services are not among the First Set of Services
1220
1200

FIG. 11

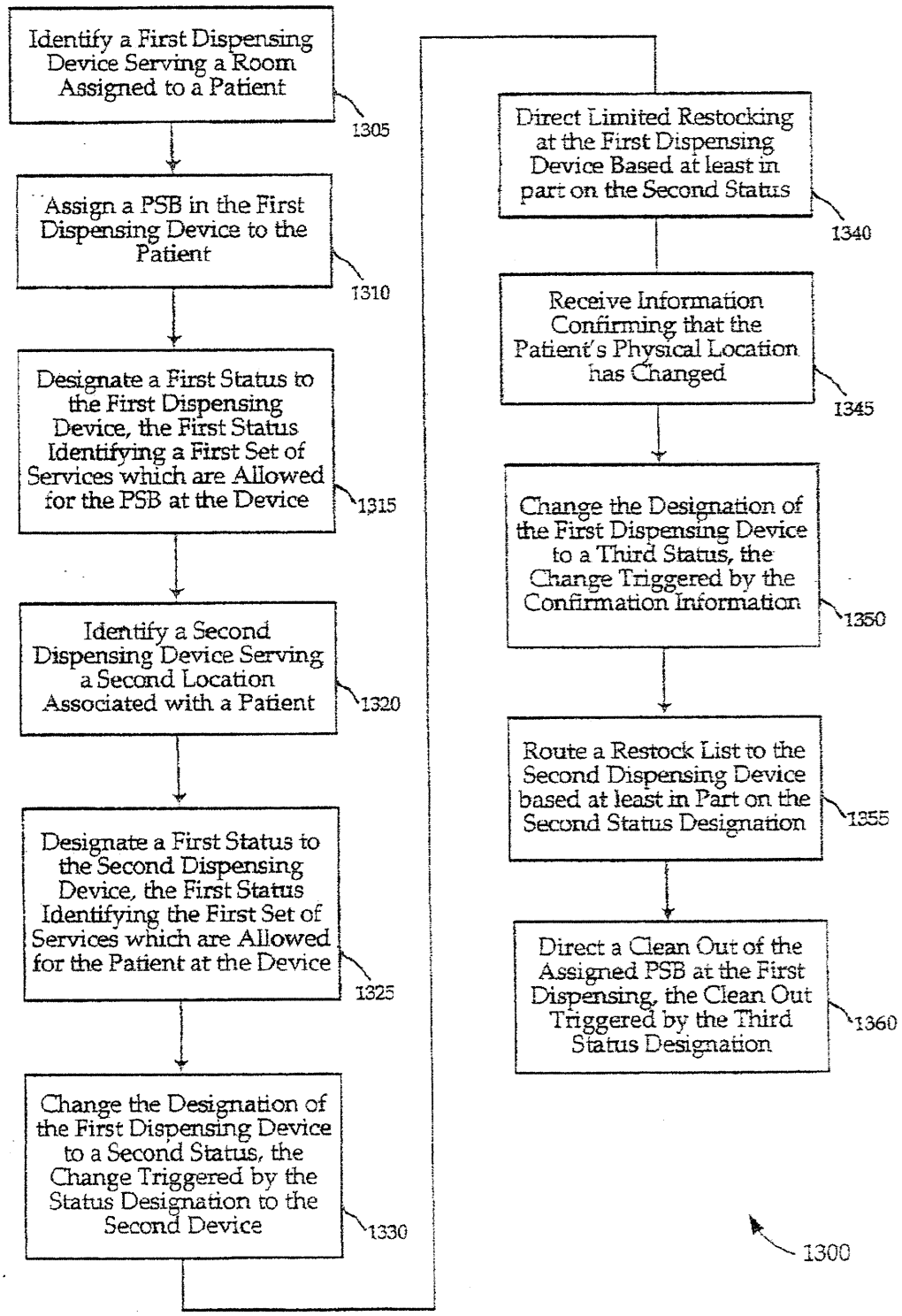

Identify a First Dispensing Device Serving a Room Assigned to a Patient
1305
Assign a PSB in the First Dispensing Device to the Patient
1310
Designate a First Status to the First Dispensing Device, the First Status Identifying a First Set of Services which are Allowed for the PSB at the Device
1315
Identify a Second Dispensing Device Serving a Second Location Associated with a Patient
1320
Designate a First Status to the Second Dispensing Device, the First Status Identifying the First Set of Services which are Allowed for the Patient at the Device
1325
Change the Designation of the First Dispensing Device to a Second Status, the Change Triggered by the Status Designation to the Second Device
1330
Direct Limited Restocking at the First Dispensing Device Based at least in part on the Second Status
1340
Receive Information Confirming that the Patient's Physical Location has Changed
1345
Change the Designation of the First Dispensing Device to a Third Status, the Change Triggered by the Confirmation Information
1350
Route a Restock List to the Second Dispensing Device based at least in Part on the Second Status Designation
1355
Direct a Clean Out of the Assigned PSB at the First Dispensing, the Clean Out Triggered by the Third Status Designation
1360
1300

FIG. 12

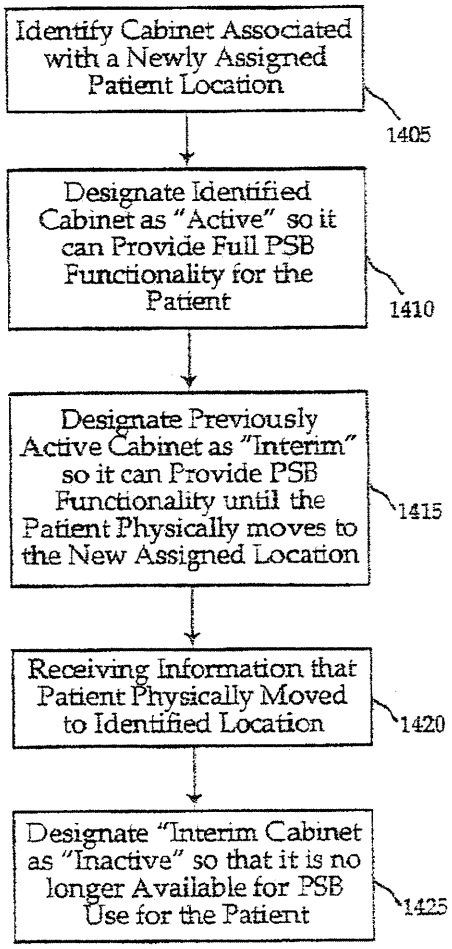
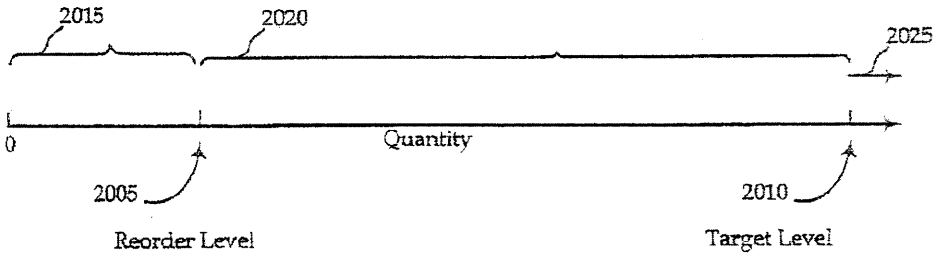

Identify Cabinet Associated with a Newly Assigned Patient Location
1405
Designate Identified Cabinet as "Active" so it can Provide Full PSB Functionality for the Patient
1410
Designate Previously Active Cabinet as "Interim" so it can Provide PSB Functionality until the Patient Physically moves to the New Assigned Location
1415
Receiving Information that Patient Physically Moved to Identified Location
1420
Designate "Interim Cabinet as "Inactive" so that it is no longer Available for PSB Use for the Patient
1425
1400

FIG. 13


2015
2020
2025
0
Quantity
2005
2010
Reorder Level
Target Level

2000

FIG. 14

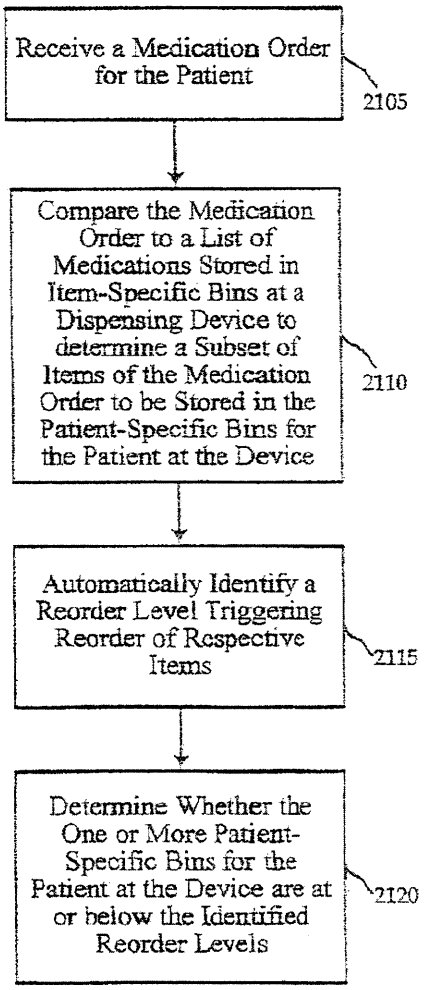

Receive a Medication Order for the Patient
2105
Compare the Medication Order to a List of Medications Stored in Item-Specific Bins at a Dispensing Device to determine a Subset of Items of the Medication Order to be Stored in the Patient-Specific Bins for the Patient at the Device
2110
Automatically Identify a Reorder Level Triggering Reorder of Respective Items
2115
Determine Whether the One or More Patient-Specific Bins for the Patient at the Device are at or below the Identified Reorder Levels
2120
2100

FIG. 15

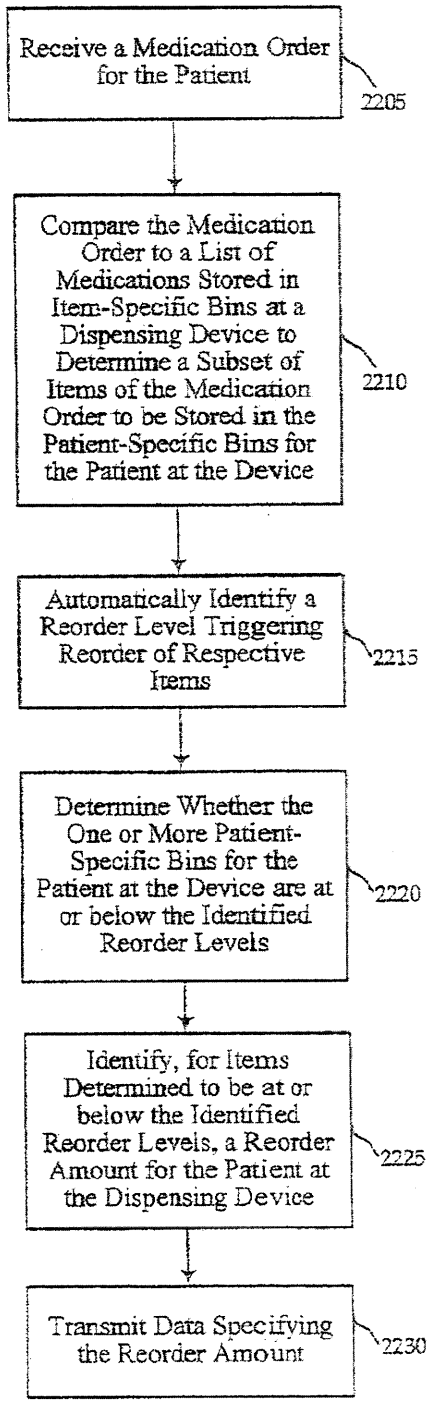

Receive a Medication Order for the Patient
2205
Compare the Medication Order to a List of Medications Stored in Item-Specific Bins at a Dispensing Device to Determine a Subset of Items of the Medication Order to be Stored in the Patient-Specific Bins for the Patient at the Device
2210
Automatically Identify a Reorder Level Triggering Reorder of Respective Items
2215
Determine Whether the One or More Patient-Specific Bins for the Patient at the Device are at or below the Identified Reorder Levels
2220
Identify, for Items Determined to be at or below the Identified Reorder Levels, a Reorder Amount for the Patient at the Dispensing Device
2225
Transmit Data Specifying the Reorder Amount
2230
2200

FIG. 16

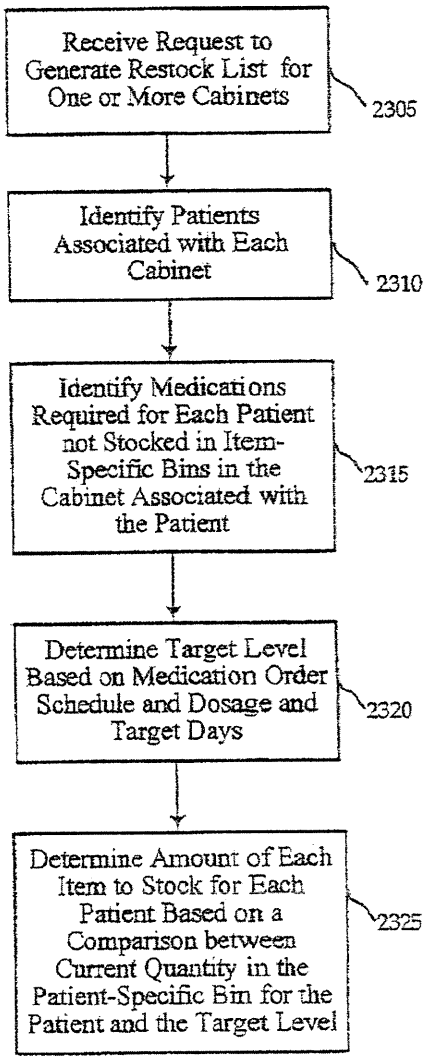

Receive Request to Generate Restock List for One or More Cabinets
2305
Identify Patients Associated with Each Cabinet
2310
Identify Medications Required for Each Patient not Stocked in Item-Specific Bins in the Cabinet Associated with the Patient
2315
Determine Target Level Based on Medication Order Schedule and Dosage and Target Days
2320
Determine Amount of Each Item to Stock for Each Patient Based on a Comparison between Current Quantity in the Patient-Specific Bin for the Patient and the Target Level
2325

FIG. 17

2300

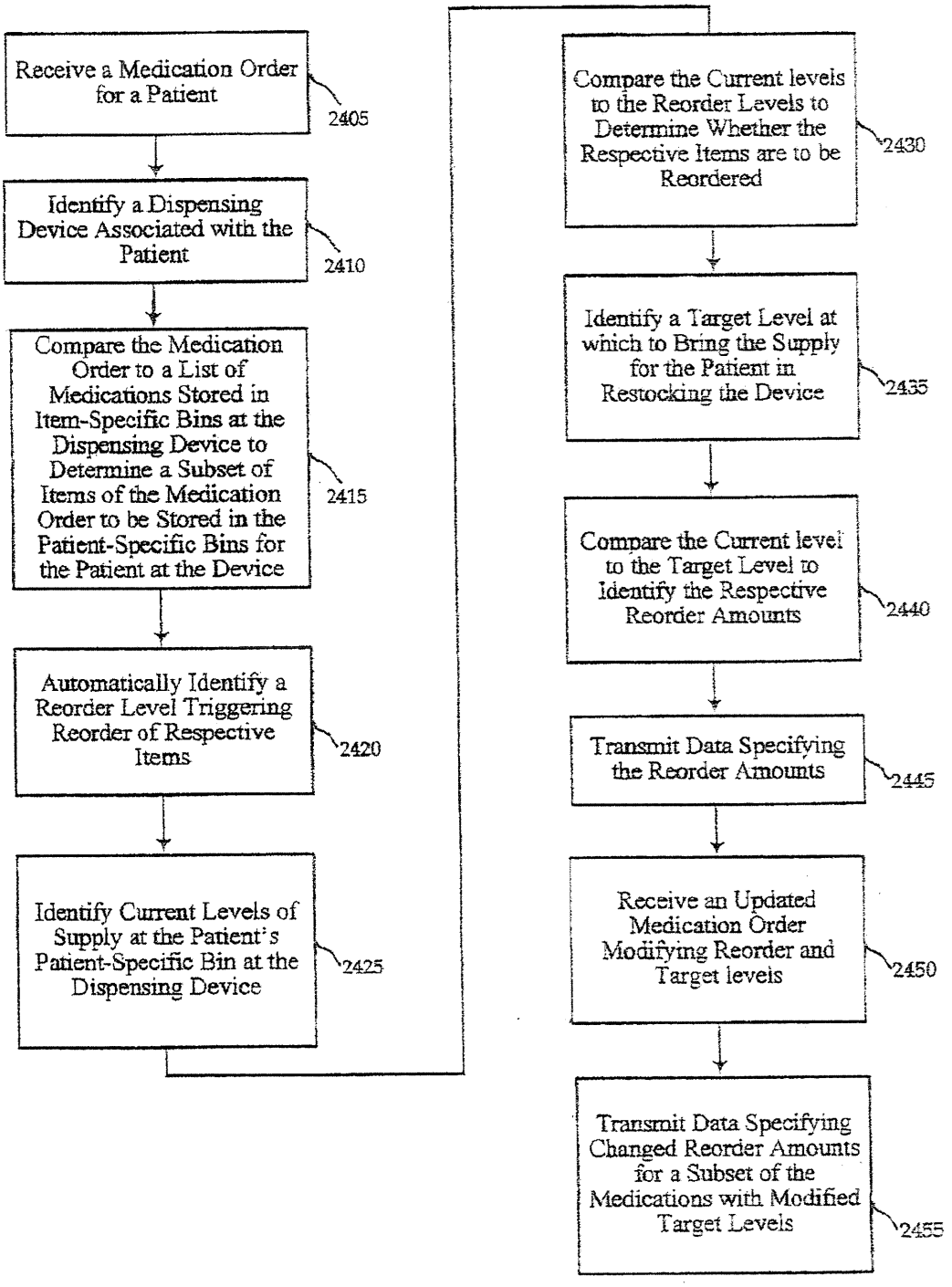

Receive a Medication Order for a Patient
2405
Identify a Dispensing Device Associated with the Patient
2410
Compare the Medication Order to a List of Medications Stored in Item-Specific Bins at the Dispensing Device to Determine a Subset of Items of the Medication Order to be Stored in the Patient-Specific Bins for the Patient at the Device
2415
Automatically Identify a Reorder Level Triggering Reorder of Respective Items
2420
Identify Current Levels of Supply at the Patient's Patient-Specific Bin at the Dispensing Device
2425
Compare the Current levels to the Reorder Levels to Determine Whether the Respective Items are to be Reordered
2430
Identify a Target Level at which to Bring the Supply for the Patient in Restocking the Device
2435
Compare the Current level to the Target Level to Identify the Respective Reorder Amounts
2440
Transmit Data Specifying the Reorder Amounts
2445
Receive an Updated Medication Order Modifying Reorder and Target levels
2450
Transmit Data Specifying Changed Reorder Amounts for a Subset of the Medications with Modified Target Levels
2455

FIG. 18

2400

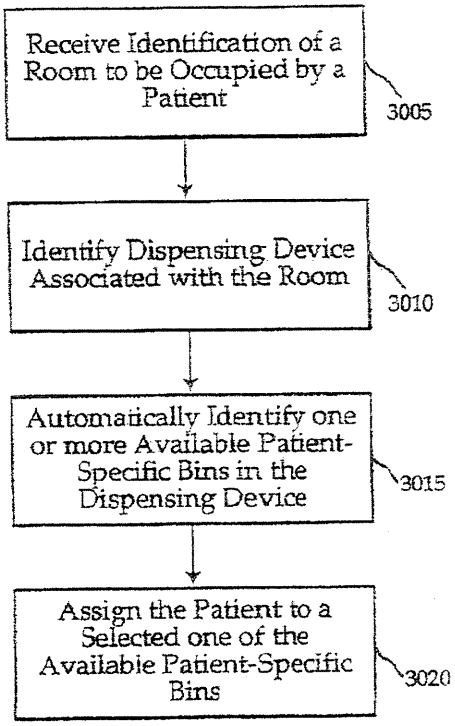

Receive Identification of a Room to be Occupied by a Patient
3005
Identify Dispensing Device Associated with the Room
3010
Automatically Identify one or more Available Patient-Specific Bins in the Dispensing Device
3015
Assign the Patient to a Selected one of the Available Patient-Specific Bins
3020
3000

FIG. 19

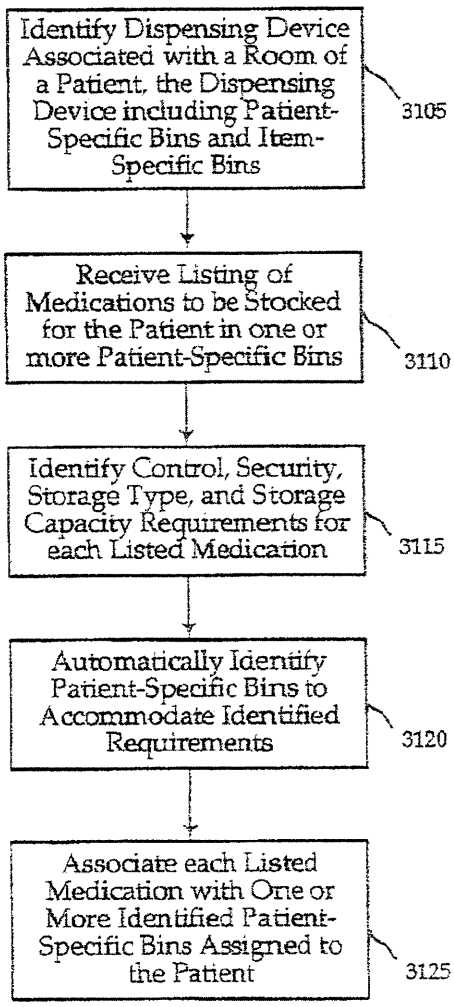

Identify Dispensing Device Associated with a Room of a Patient, the Dispensing Device including Patient-Specific Bins and Item-Specific Bins
3105
Receive Listing of Medications to be Stocked for the Patient in one or more Patient-Specific Bins
3110
Identify Control, Security, Storage Type, and Storage Capacity Requirements for each Listed Medication
3115
Automatically Identify Patient-Specific Bins to Accommodate Identified Requirements
3120
Associate each Listed Medication with One or More Identified Patient-Specific Bins Assigned to the Patient
3125
3100

FIG. 20

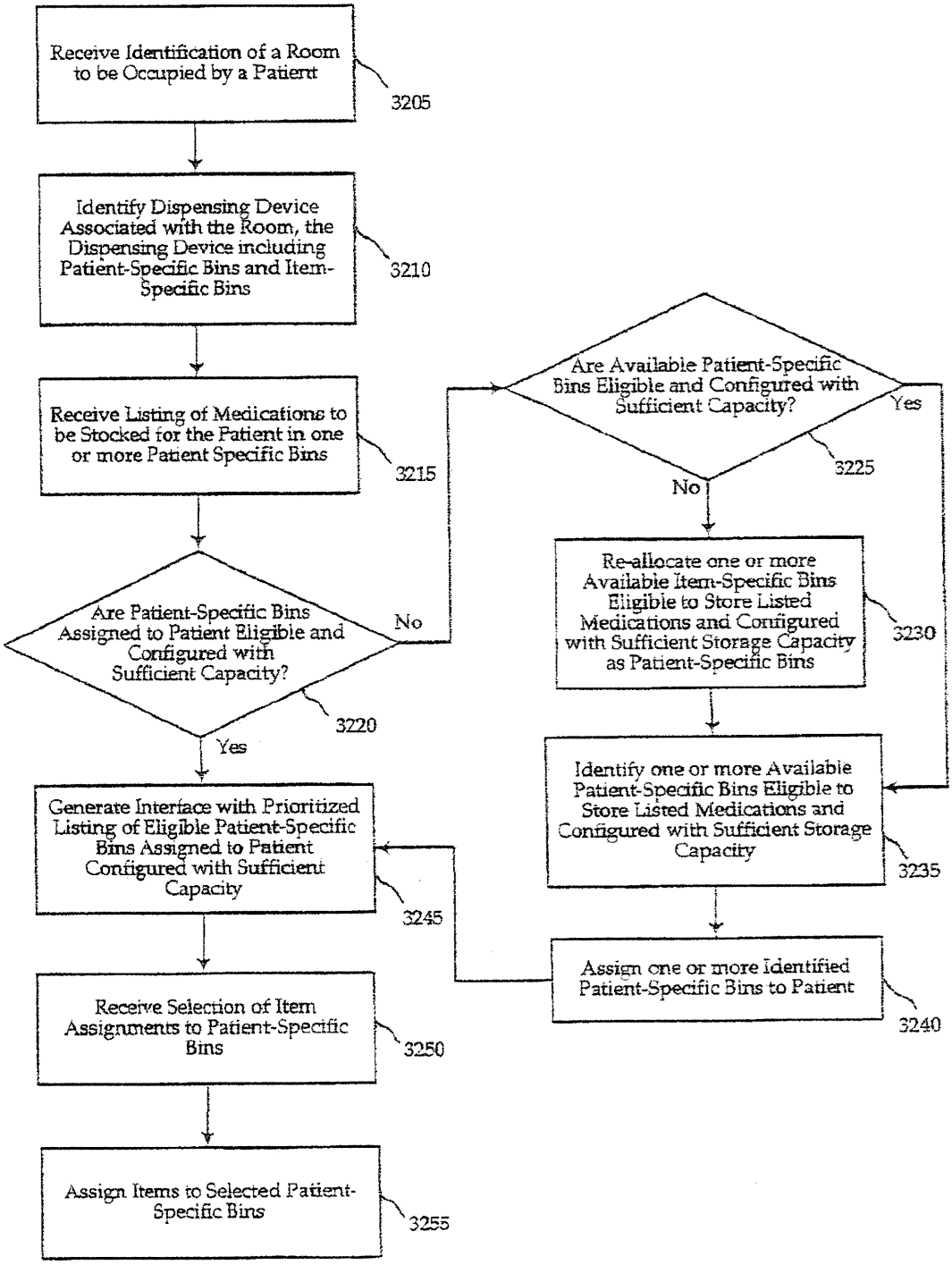

Receive Identification of a Room to be Occupied by a Patient
3205
Identify Dispensing Device Associated with the Room, the Dispensing Device including Patient-Specific Bins and Item-Specific Bins
3210
Receive Listing of Medications to be Stocked for the Patient in one or more Patient Specific Bins
3215
Are Patient-Specific Bins Assigned to Patient Eligible and Configured with Sufficient Capacity?
3220
No
Yes
Are Available Patient-Specific Bins Eligible and Configured with Sufficient Capacity?
3225
Yes
No
Re-allocate one or more Available Item-Specific Bins Eligible to Store Listed Medications and Configured with Sufficient Storage Capacity as Patient-Specific Bins
3230
Identify one or more Available Patient-Specific Bins Eligible to Store Listed Medications and Configured with Sufficient Storage Capacity
3235
Assign one or more Identified Patient-Specific Bins to Patient
3240
Generate Interface with Prioritized Listing of Eligible Patient-Specific Bins Assigned to Patient Configured with Sufficient Capacity
3245
Receive Selection of Item Assignments to Patient-Specific Bins
3250
Assign Items to Selected Patient-Specific Bins
3255

FIG.21

3200

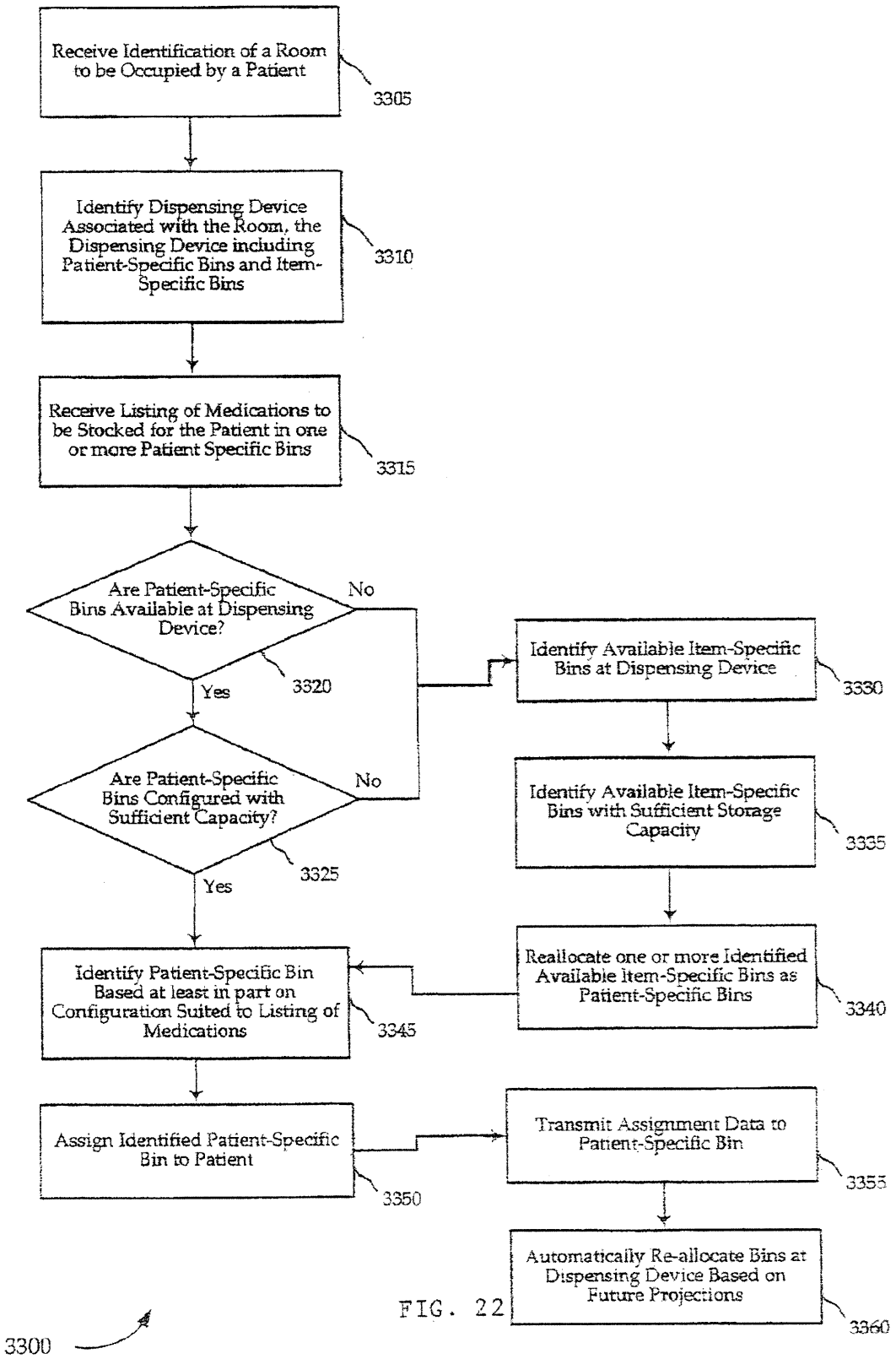

Receive Identification of a Room to be Occupied by a Patient
3305
Identify Dispensing Device Associated with the Room, the Dispensing Device including Patient-Specific Bins and Item-Specific Bins
3310
Receive Listing of Medications to be Stocked for the Patient in one or more Patient Specific Bins
3315
Are Patient-Specific Bins Available at Dispensing Device?
No
Yes
3320
Are Patient-Specific Bins Configured with Sufficient Capacity?
No
Yes
3325
Identify Available Item-Specific Bins at Dispensing Device
3330
Identify Available Item-Specific Bins with Sufficient Storage Capacity
3335
Reallocate one or more Identified Available Item-Specific Bins as Patient-Specific Bins
3340
Identify Patient-Specific Bin Based at least in part on Configuration Suited to Listing of Medications
3345
Assign Identified Patient-Specific Bin to Patient
3350
Transmit Assignment Data to Patient-Specific Bin
3355
Automatically Re-allocate Bins at Dispensing Device Based on Future Projections
3360
3300

FIG. 22

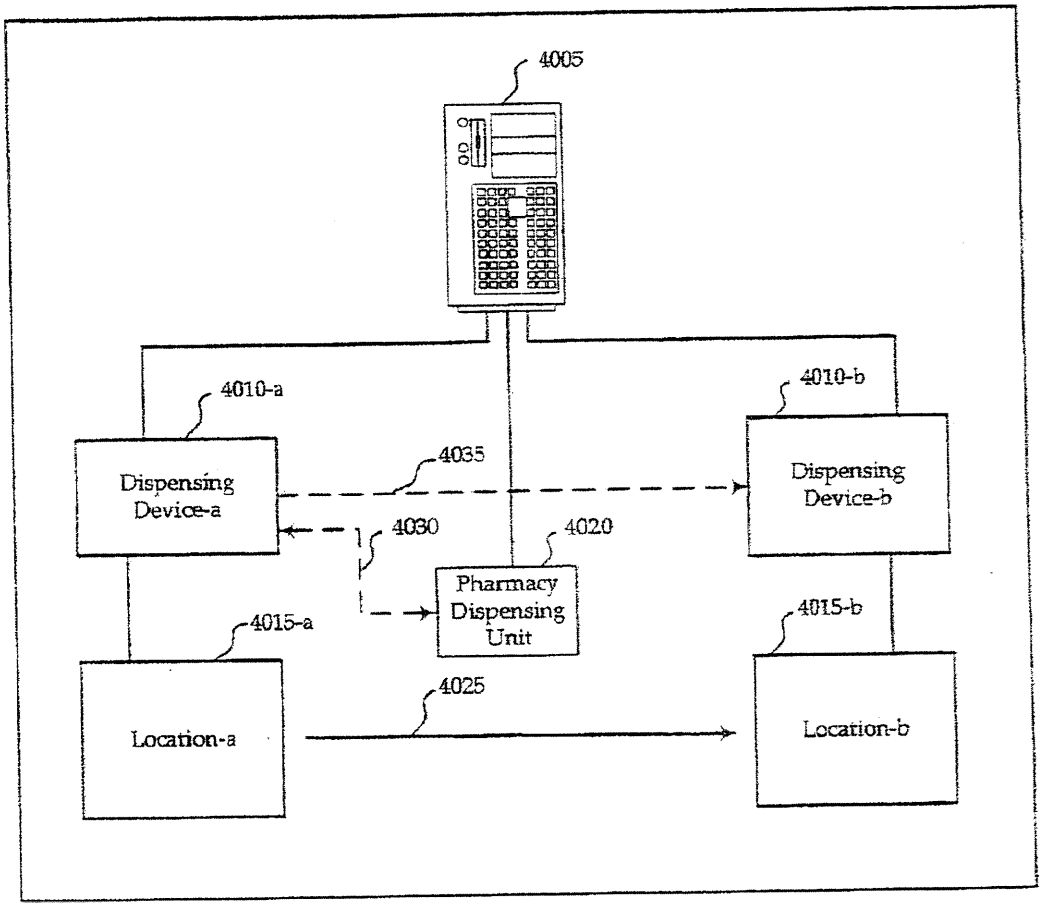

4005
4010-a
4010-b
Dispensing Device-a
4035
Dispensing Device-b
4030
4020
Pharmacy Dispensing Unit
4015-a
4015-b
Location-a
4025
Location-b
4000

FIG. 23

4105 Bin Type	4110 Bin Storage Space	4115 Bin Security	4120 Bin Location in Cabinet	4125 Med Types Stored	4130 Med Amount	4135 Med Security	4140 Capacity Utilization
Bin 4, 6-Bin Sensing	X cm^3	0	Zone 1, Drawer 2	Med 1	10	L1	M1%
Bin 5, 6-Bin Sensing	X cm^3	0	Zone 1, Drawer 2	Med 2	12	L1	M2%
				Med 3	3	L1	M3%
Bin 8, 12-bin Locking	Y cm^3	2	Zone 1, Drawer 4	Med 4	23	L2	M4%
				Med 5	14	L3	M5%

4100

FIG. 24

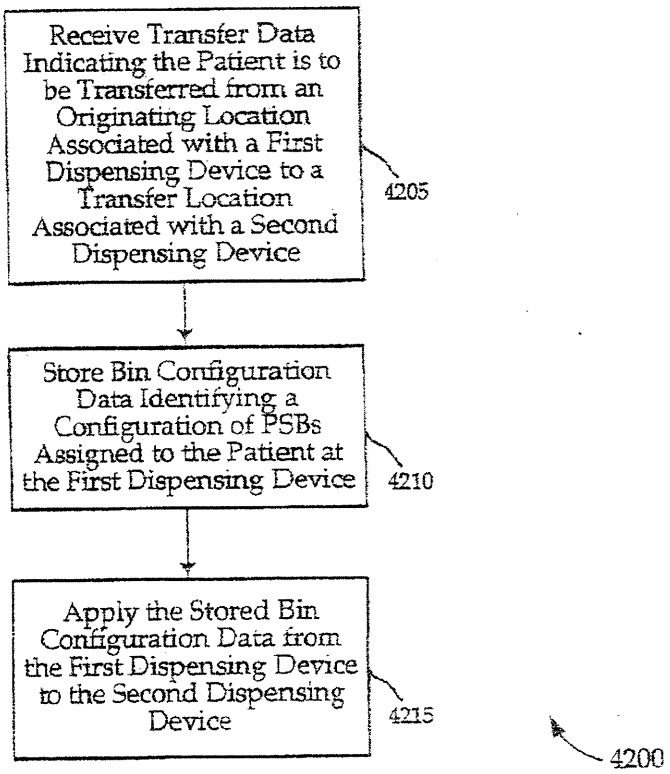

Receive Transfer Data Indicating the Patient is to be Transferred from an Originating Location Associated with a First Dispensing Device to a Transfer Location Associated with a Second Dispensing Device
4205
Store Bin Configuration Data Identifying a Configuration of PSBs Assigned to the Patient at the First Dispensing Device
4210
Apply the Stored Bin Configuration Data from the First Dispensing Device to the Second Dispensing Device
4215
4200

FIG. 25

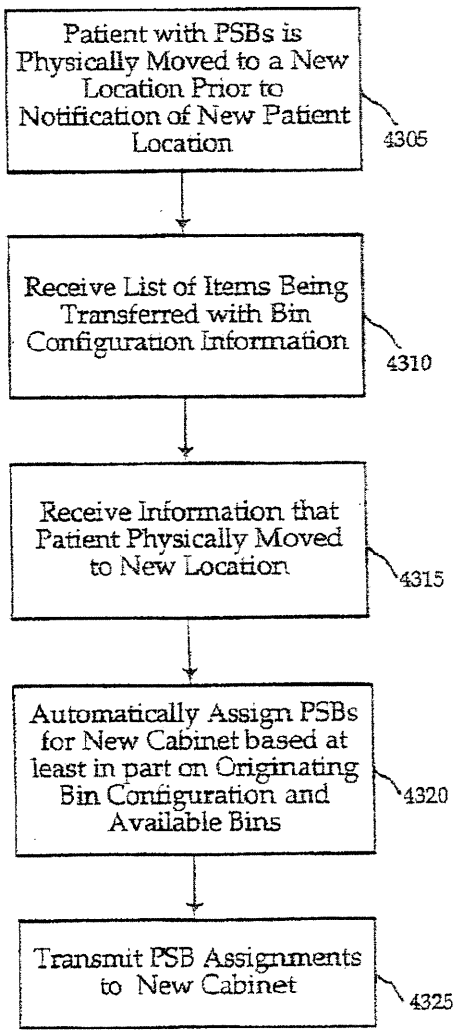

Patient with PSBs is Physically Moved to a New Location Prior to Notification of New Patient Location
4305
Receive List of Items Being Transferred with Bin Configuration Information
4310
Receive Information that Patient Physically Moved to New Location
4315
Automatically Assign PSBs for New Cabinet based at least in part on Originating Bin Configuration and Available Bins
4320
Transmit PSB Assignments to New Cabinet
4325
4300

FIG. 26

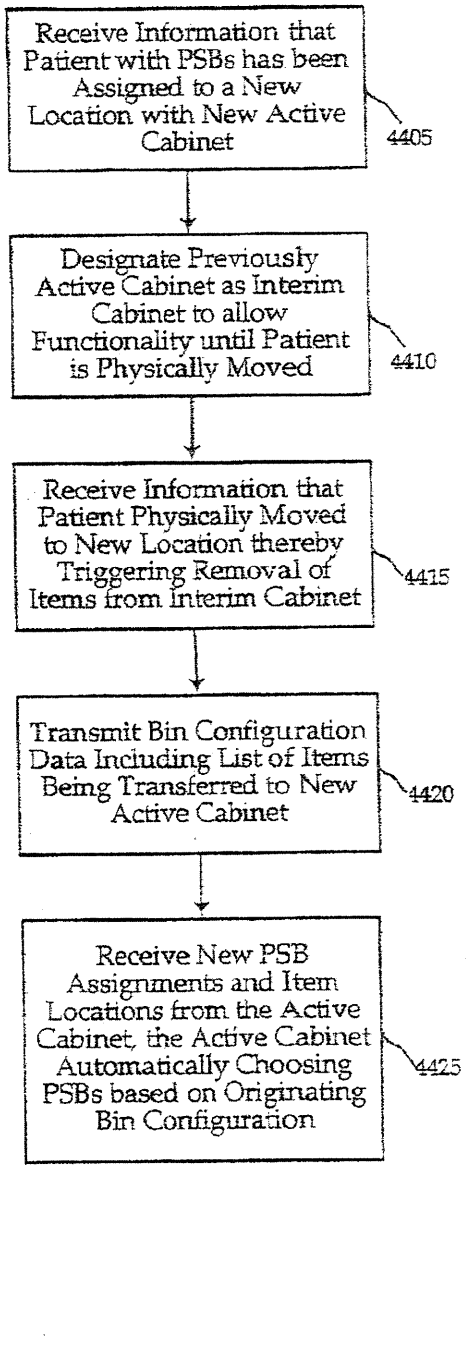

Receive Information that Patient with PSBs has been Assigned to a New Location with New Active Cabinet
4405
Designate Previously Active Cabinet as Interim Cabinet to allow Functionality until Patient is Physically Moved
4410
Receive Information that Patient Physically Moved to New Location thereby Triggering Removal of Items from Interim Cabinet
4415
Transmit Bin Configuration Data Including List of Items Being Transferred to New Active Cabinet
4420
Receive New PSB Assignments and Item Locations from the Active Cabinet, the Active Cabinet Automatically Choosing PSBs based on Originating Bin Configuration
4425
4400

FIG. 27

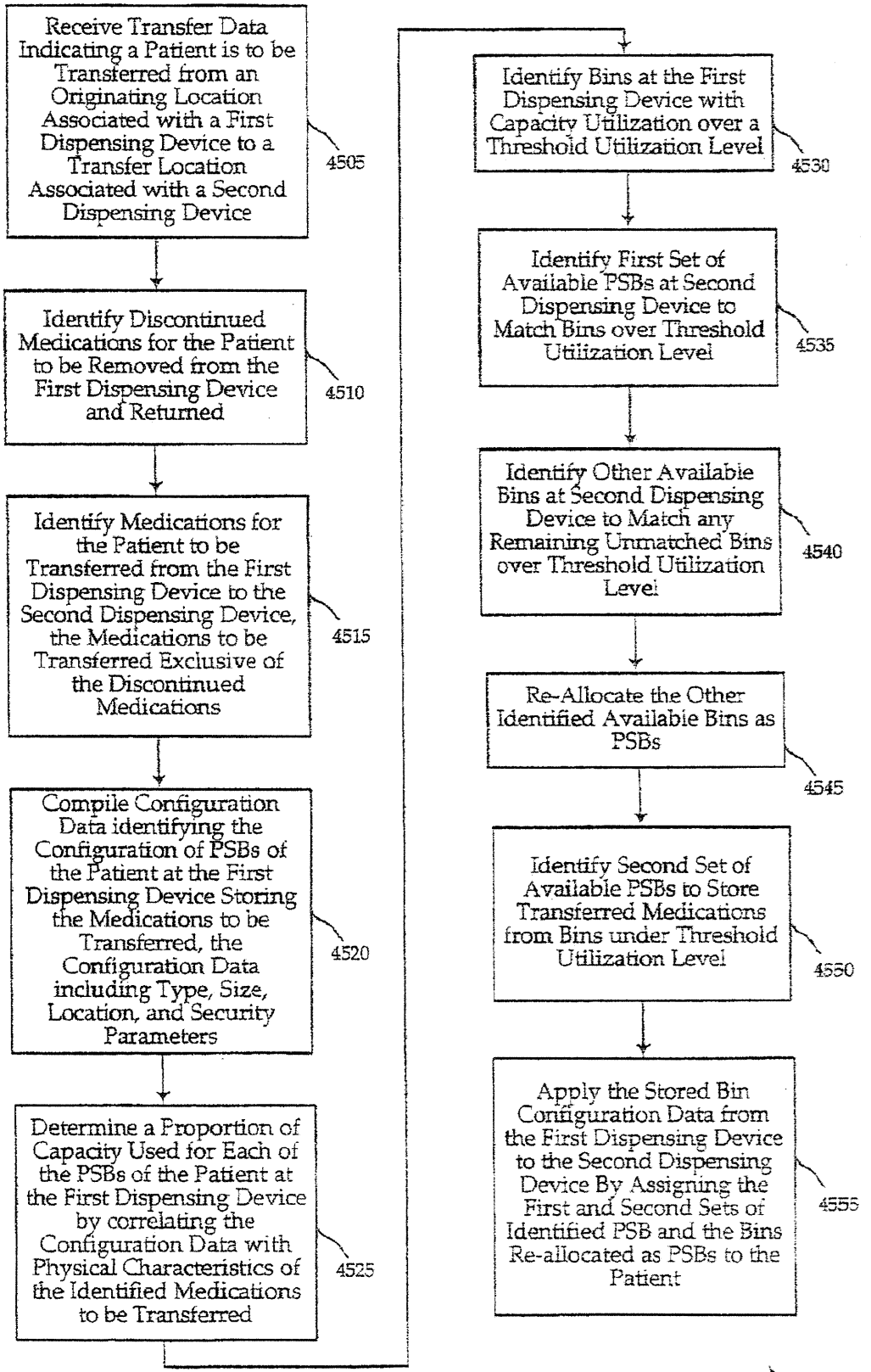

Receive Transfer Data Indicating a Patient is to be Transferred from an Originating Location Associated with a First Dispensing Device to a Transfer Location Associated with a Second Dispensing Device
4505
Identify Discontinued Medications for the Patient to be Removed from the First Dispensing Device and Returned
4510
Identify Medications for the Patient to be Transferred from the First Dispensing Device to the Second Dispensing Device, the Medications to be Transferred Exclusive of the Discontinued Medications
4515
Compile Configuration Data identifying the Configuration of PSBs of the Patient at the First Dispensing Device Storing the Medications to be Transferred, the Configuration Data including Type, Size, Location, and Security Parameters
4520
Determine a Proportion of Capacity Used for Each of the PSBs of the Patient at the First Dispensing Device by correlating the Configuration Data with Physical Characteristics of the Identified Medications to be Transferred
4525
Identify Bins at the First Dispensing Device with Capacity Utilization over a Threshold Utilization Level
4530
Identify First Set of Available PSBs at Second Dispensing Device to Match Bins over Threshold Utilization Level
4535
Identify Other Available Bins at Second Dispensing Device to Match any Remaining Unmatched Bins over Threshold Utilization Level
4540
Re-Allocate the Other Identified Available Bins as PSBs
4545
Identify Second Set of Available PSBs to Store Transferred Medications from Bins under Threshold Utilization Level
4550
Apply the Stored Bin Configuration Data from the First Dispensing Device to the Second Dispensing Device By Assigning the First and Second Sets of Identified PSB and the Bins Re-allocated as PSBs to the Patient
4555
4500

FIG. 28

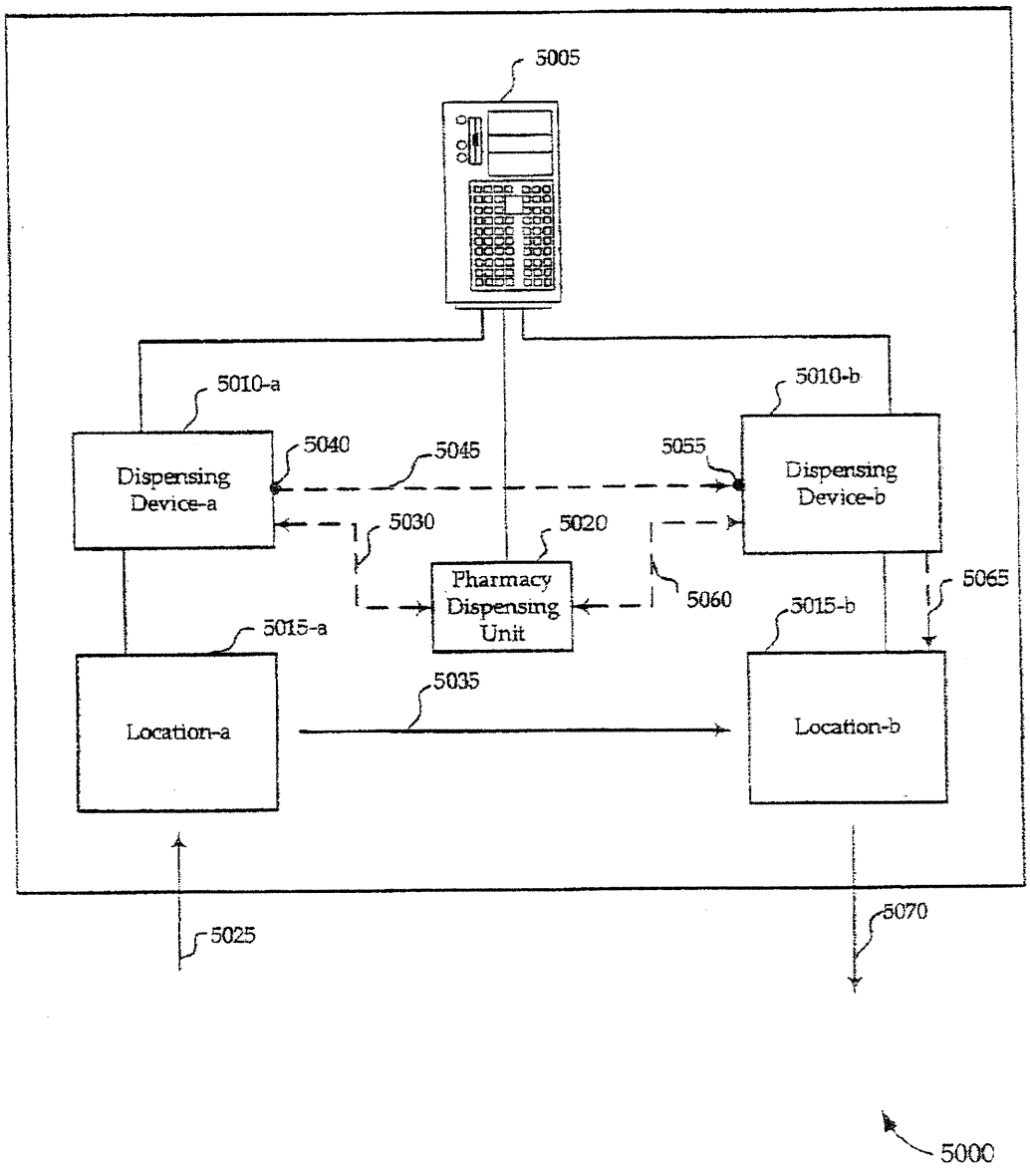

5005
5010-a
5010-b
Dispensing Device-a
5040
5045
5055
Dispensing Device-b
5030
5020
Pharmacy Dispensing Unit
5060
5065
5015-a
5015-b
Location-a
5035
Location-b
5025
5070
5000

FIG. 29

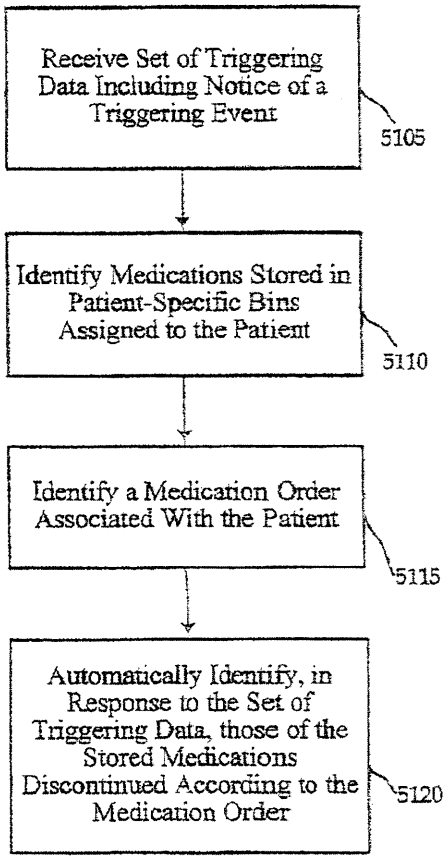

Receive Set of Triggering Data Including Notice of a Triggering Event
5105
Identify Medications Stored in Patient-Specific Bins Assigned to the Patient
5110
Identify a Medication Order Associated With the Patient
5115
Automatically Identify, in Response to the Set of Triggering Data, those of the Stored Medications Discontinued According to the Medication Order
5120
5100

FIG. 30

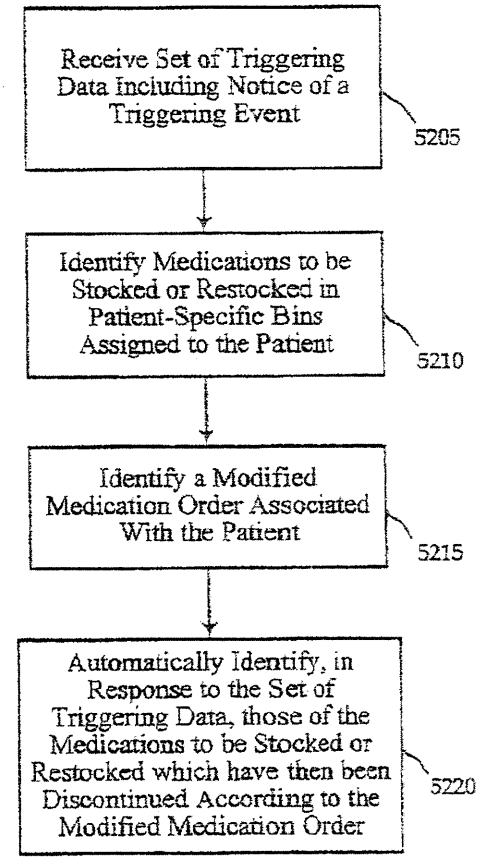

Receive Set of Triggering Data Including Notice of a Triggering Event
5205
Identify Medications to be Stocked or Restocked in Patient-Specific Bins Assigned to the Patient
5210
Identify a Modified Medication Order Associated With the Patient
5215
Automatically Identify, in Response to the Set of Triggering Data, those of the Medications to be Stocked or Restocked which have then been Discontinued According to the Modified Medication Order
5220
5200

FIG. 31

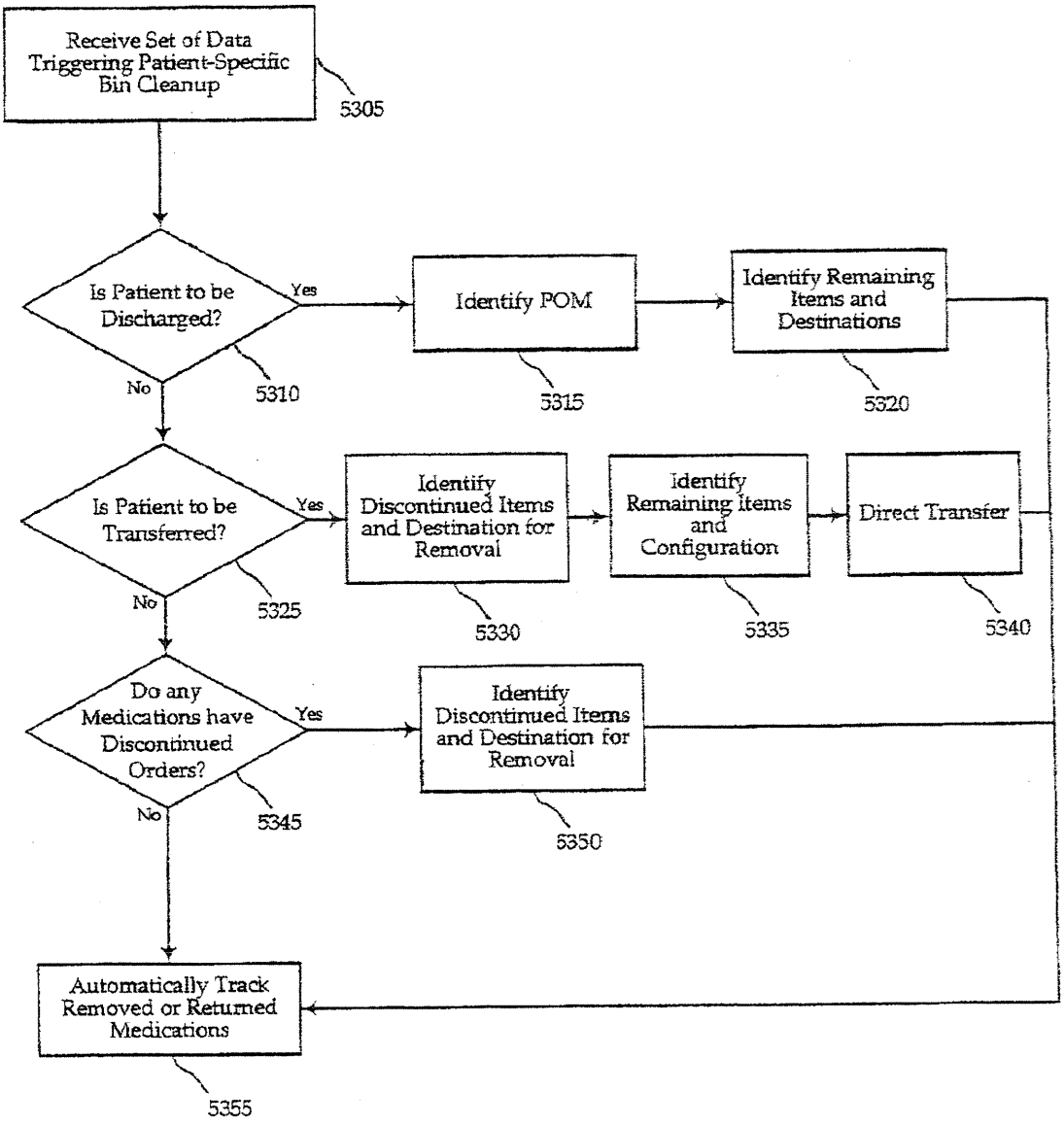

Receive Set of Data Triggering Patient-Specific Bin Cleanup
5305
Is Patient to be Discharged?
Yes
No
5310
Identify POM
5315
Identify Remaining Items and Destinations
5320
Is Patient to be Transferred?
Yes
No
5325
Identify Discontinued Items and Destination for Removal
5330
Identify Remaining Items and Configuration
5335
Direct Transfer
5340
Do any Medications have Discontinued Orders?
Yes
No
5345
Identify Discontinued Items and Destination for Removal
5350
Automatically Track Removed or Returned Medications
5355

FIG. 32

5300

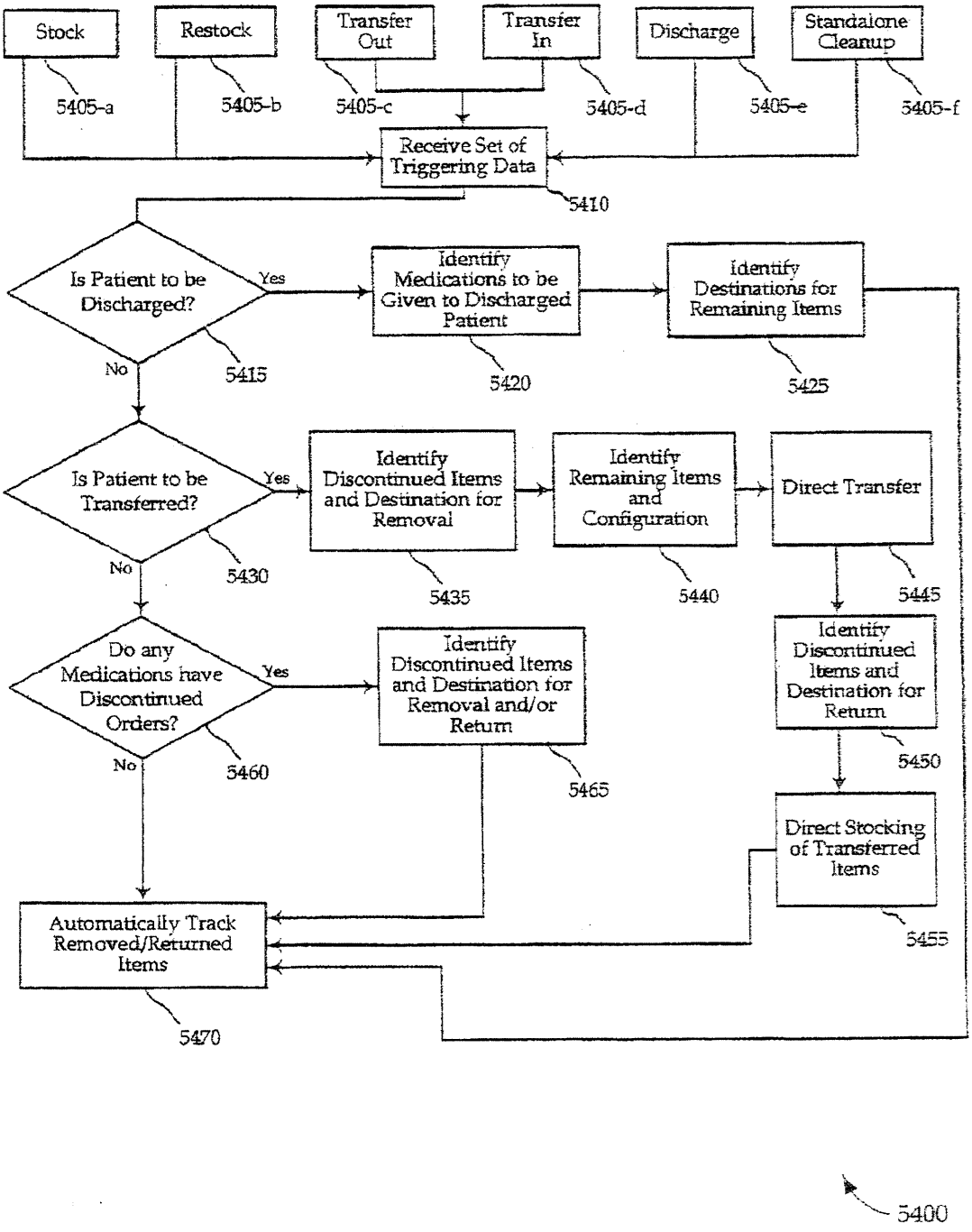

Stock
Restock
Transfer Out
Transfer In
Discharge
Standalone Cleanup
5405-a
5405-b
5405-c
5405-d
5405-e
5405-f
Receive Set of Triggering Data
5410
Is Patient to be Discharged?
Yes
No
5415
Identify Medications to be Given to Discharged Patient
5420
Identify Destinations for Remaining Items
5425
Is Patient to be Transferred?
Yes
No
5430
Identify Discontinued Items and Destination for Removal
5435
Identify Remaining Items and Configuration
5440
Direct Transfer
5445
Do any Medications have Discontinued Orders?
Yes
No
5460
Identify Discontinued Items and Destination for Removal and/or Return
5465
Identify Discontinued Items and Destination for Return
5450
Direct Stocking of Transferred Items
5455
Automatically Track Removed/Returned Items
5470
5400

FIG. 33

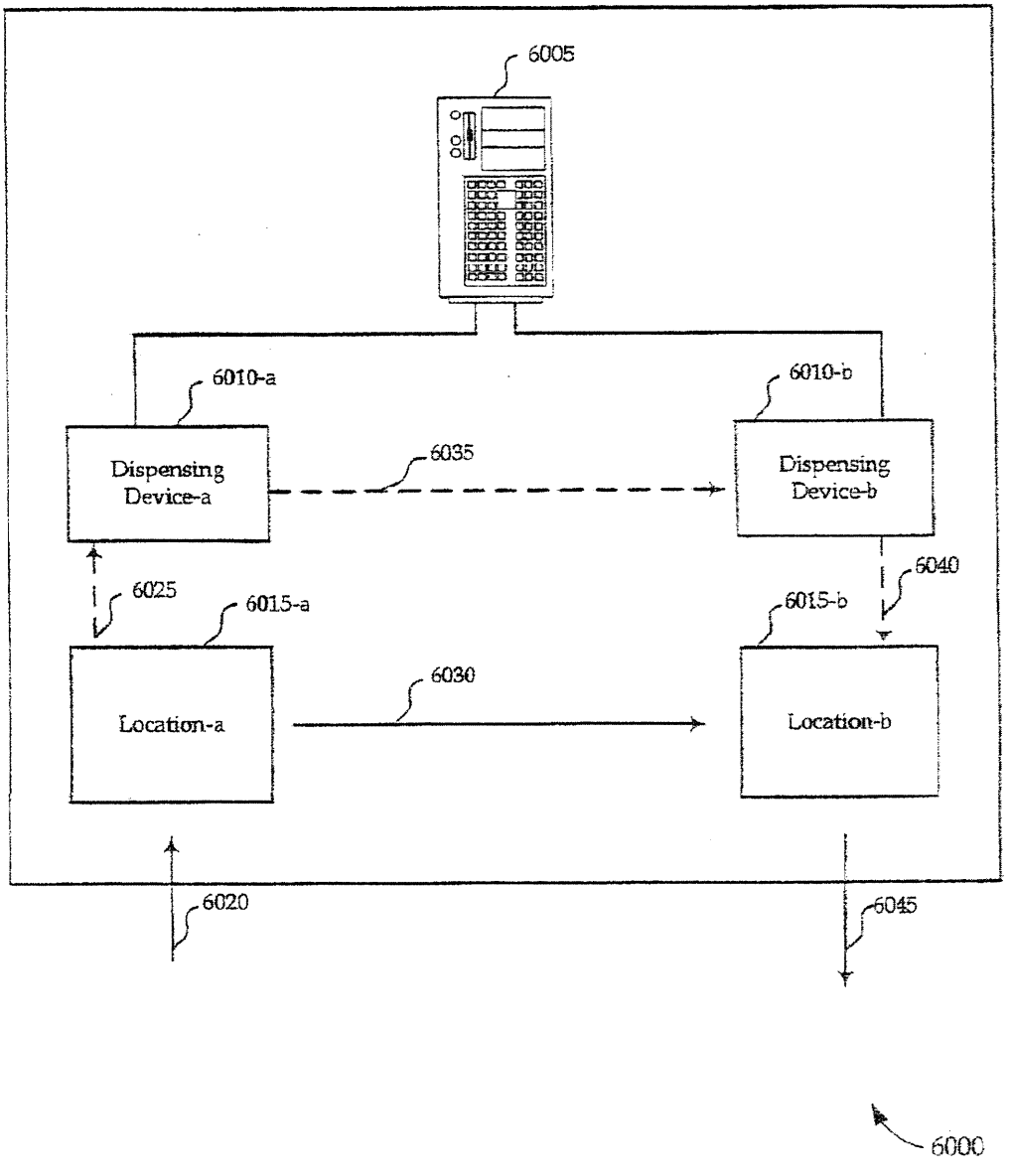

6005
6010-a
6010-b
Dispensing Device-a
6035
Dispensing Device-b
6040
6025
6015-a
6015-b
Location-a
6030
Location-b
6020
6045
6000

FIG. 34

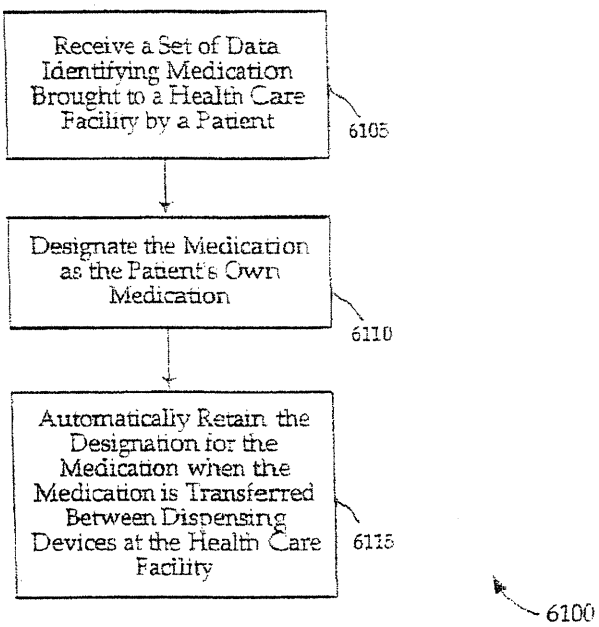

Receive a Set of Data Identifying Medication Brought to a Health Care Facility by a Patient
6105
Designate the Medication as the Patient's Own Medication
6110
Automatically Retain the Designation for the Medication when the Medication is Transferred Between Dispensing Devices at the Health Care Facility
6115
6100

FIG. 35

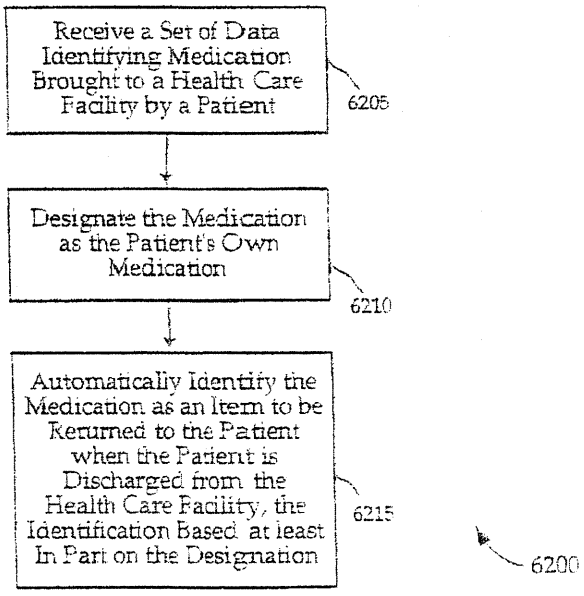

Receive a Set of Data Identifying Medication Brought to a Health Care Facility by a Patient
6205
Designate the Medication as the Patient's Own Medication
6210
Automatically Identify the Medication as an Item to be Returned to the Patient when the Patient is Discharged from the Health Care Facility, the Identification Based at least In Part on the Designation
6215
6200

FIG. 36

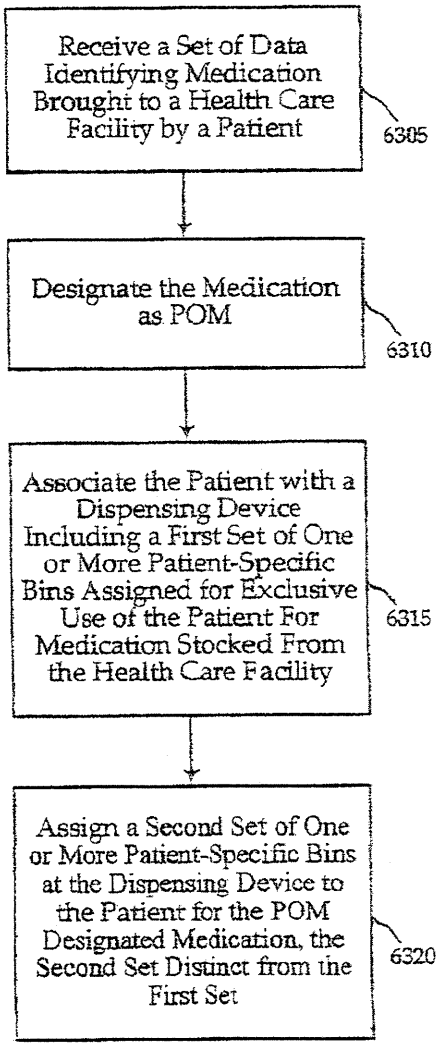

Receive a Set of Data Identifying Medication Brought to a Health Care Facility by a Patient
6305
Designate the Medication as POM
6310
Associate the Patient with a Dispensing Device Including a First Set of One or More Patient-Specific Bins Assigned for Exclusive Use of the Patient For Medication Stocked From the Health Care Facility
6315
Assign a Second Set of One or More Patient-Specific Bins at the Dispensing Device to the Patient for the POM Designated Medication, the Second Set Distinct from the First Set
6320
6300

FIG. 37

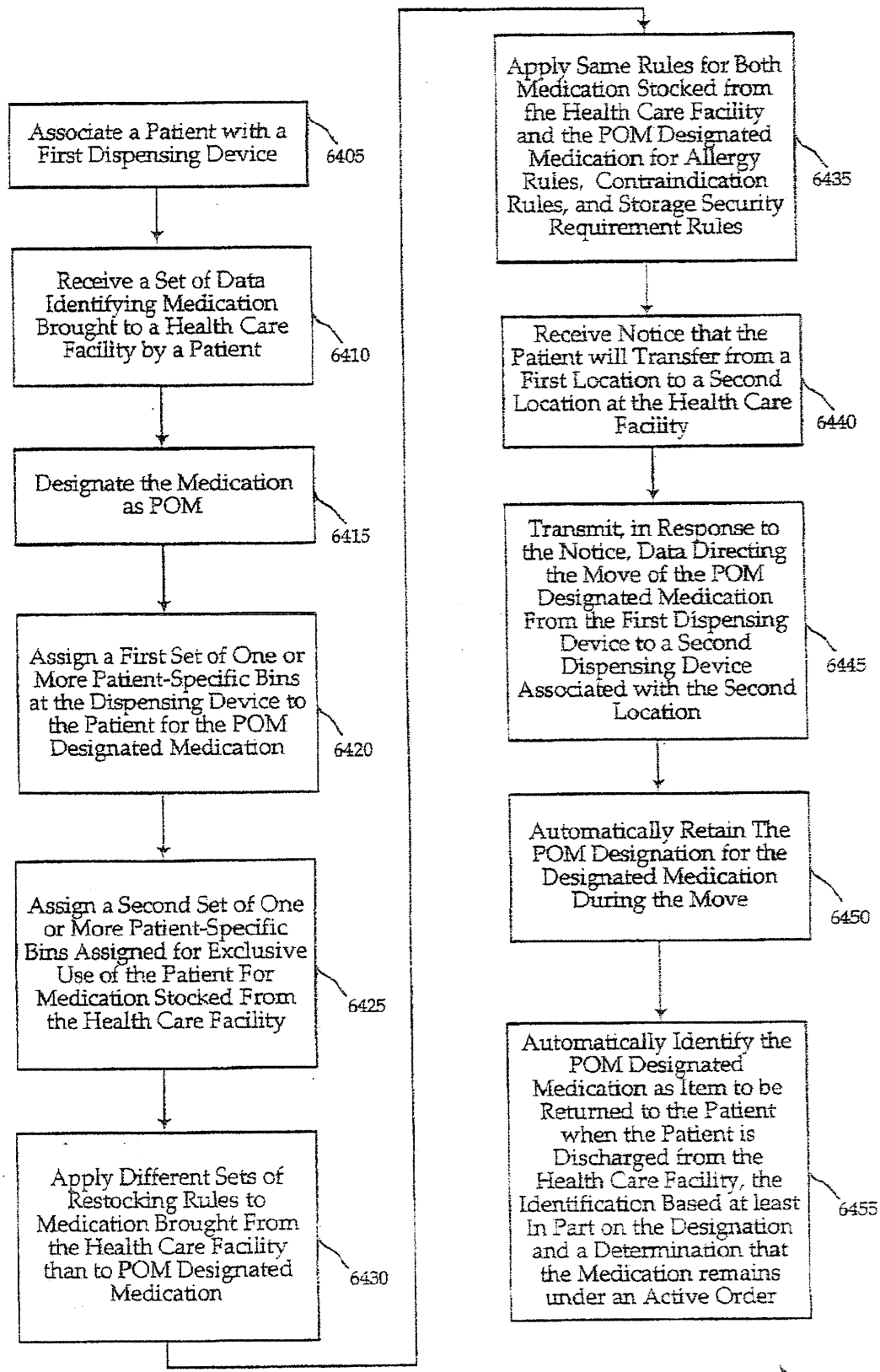

Associate a Patient with a First Dispensing Device
6405
Receive a Set of Data Identifying Medication Brought to a Health Care Facility by a Patient
6410
Designate the Medication as POM
6415
Assign a First Set of One or More Patient-Specific Bins at the Dispensing Device to the Patient for the POM Designated Medication
6420
Assign a Second Set of One or More Patient-Specific Bins Assigned for Exclusive Use of the Patient For Medication Stocked From the Health Care Facility
6425
Apply Different Sets of Restocking Rules to Medication Brought From the Health Care Facility than to POM Designated Medication
6430
Apply Same Rules for Both Medication Stocked from the Health Care Facility and the POM Designated Medication for Allergy Rules, Contraindication Rules, and Storage Security Requirement Rules
6435
Receive Notice that the Patient will Transfer from a First Location to a Second Location at the Health Care Facility
6440
Transmit, in Response to the Notice, Data Directing the Move of the POM Designated Medication From the First Dispensing Device to a Second Dispensing Device Associated with the Second Location
6445
Automatically Retain The POM Designation for the Designated Medication During the Move
6450
Automatically Identify the POM Designated Medication as Item to be Returned to the Patient when the Patient is Discharged from the Health Care Facility, the Identification Based at least In Part on the Designation and a Determination that the Medication remains under an Active Order
6455
6400

FIG. 38

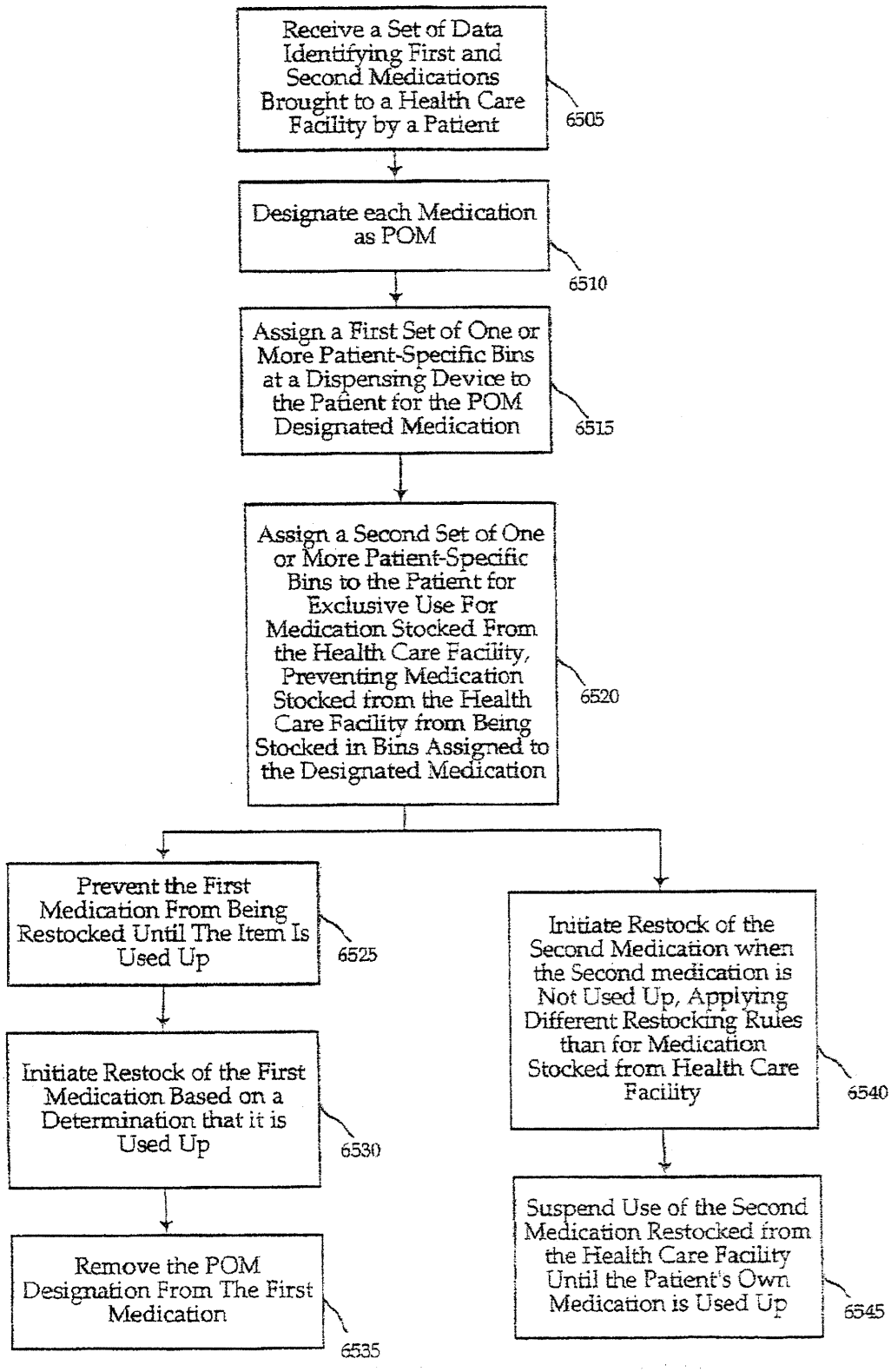

Receive a Set of Data Identifying First and Second Medications Brought to a Health Care Facility by a Patient
6505
Designate each Medication as POM
6510
Assign a First Set of One or More Patient-Specific Bins at a Dispensing Device to the Patient for the POM Designated Medication
6515
Assign a Second Set of One or More Patient-Specific Bins to the Patient for Exclusive Use For Medication Stocked From the Health Care Facility, Preventing Medication Stocked from the Health Care Facility from Being Stocked in Bins Assigned to the Designated Medication
6520
Prevent the First Medication From Being Restocked Until The Item Is Used Up
6525
Initiate Restock of the First Medication Based on a Determination that it is Used Up
6530
Remove the POM Designation From The First Medication
6535
Initiate Restock of the Second Medication when the Second medication is Not Used Up, Applying Different Restocking Rules than for Medication Stocked from Health Care Facility
6540
Suspend Use of the Second Medication Restocked from the Health Care Facility Until the Patient's Own Medication is Used Up
6545
6500

FIG. 39

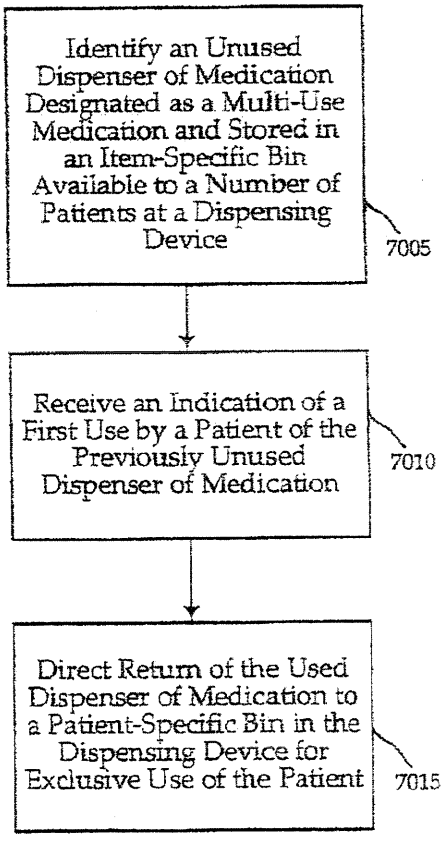

Identify an Unused Dispenser of Medication Designated as a Multi-Use Medication and Stored in an Item-Specific Bin Available to a Number of Patients at a Dispensing Device
7005
Receive an Indication of a First Use by a Patient of the Previously Unused Dispenser of Medication
7010
Direct Return of the Used Dispenser of Medication to a Patient-Specific Bin in the Dispensing Device for Exclusive Use of the Patient
7015
7000

FIG. 40

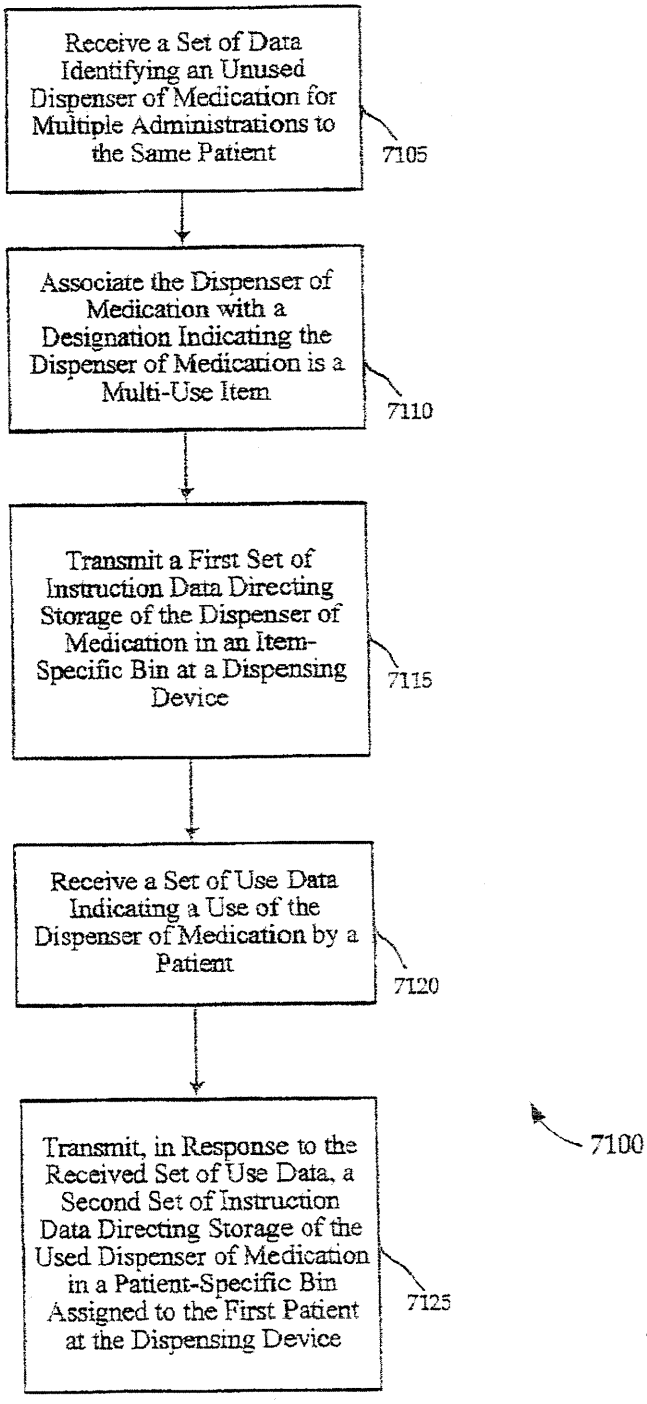

Receive a Set of Data Identifying an Unused Dispenser of Medication for Multiple Administrations to the Same Patient
7105
Associate the Dispenser of Medication with a Designation Indicating the Dispenser of Medication is a Multi-Use Item
7110
Transmit a First Set of Instruction Data Directing Storage of the Dispenser of Medication in an Item-Specific Bin at a Dispensing Device
7115
Receive a Set of Use Data Indicating a Use of the Dispenser of Medication by a Patient
7120
Transmit, in Response to the Received Set of Use Data, a Second Set of Instruction Data Directing Storage of the Used Dispenser of Medication in a Patient-Specific Bin Assigned to the First Patient at the Dispensing Device
7125
7100

FIG. 41

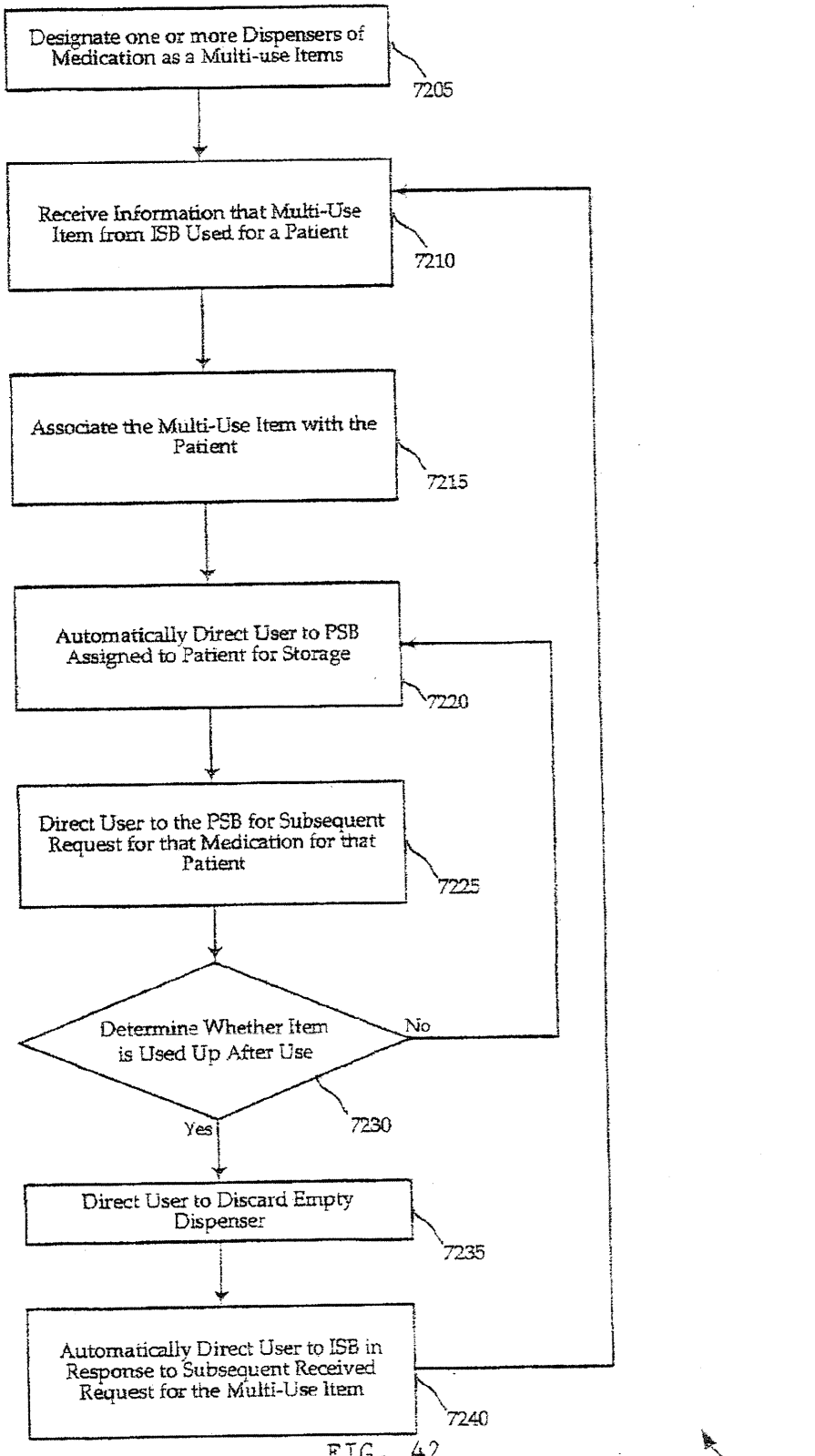

Designate one or more Dispensers of Medication as a Multi-use Items
7205
Receive Information that Multi-Use Item from ISB Used for a Patient
7210
Associate the Multi-Use Item with the Patient
7215
Automatically Direct User to PSB Assigned to Patient for Storage
7220
Direct User to the PSB for Subsequent Request for that Medication for that Patient
7225
Determine Whether Item is Used Up After Use
No
Yes
7230
Direct User to Discard Empty Dispenser
7235
Automatically Direct User to ISB in Response to Subsequent Received Request for the Multi-Use Item
7240
7200

FIG. 42

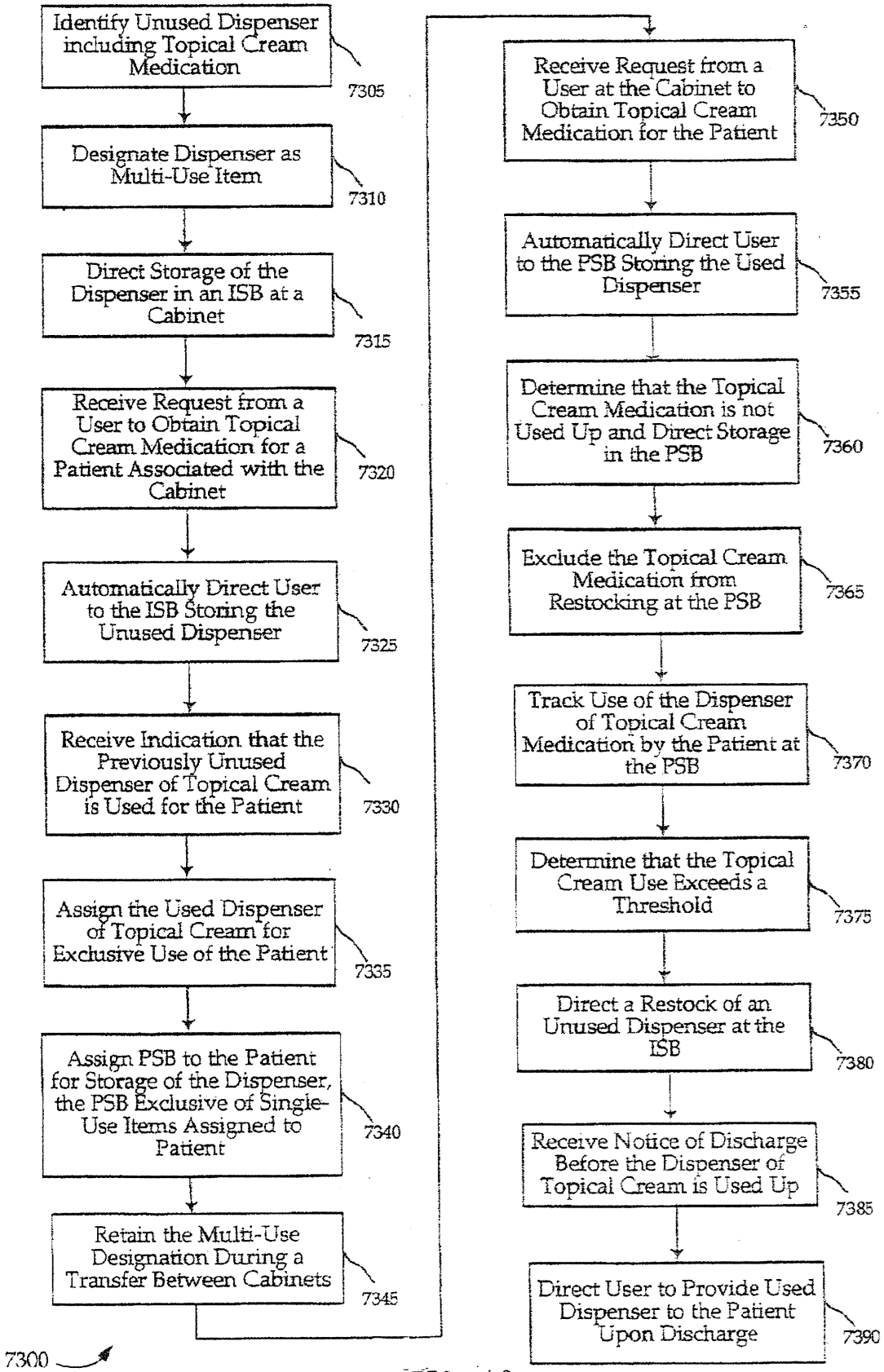

Identify Unused Dispenser including Topical Cream Medication
7305
Designate Dispenser as Multi-Use Item
7310
Direct Storage of the Dispenser in an ISB at a Cabinet
7315
Receive Request from a User to Obtain Topical Cream Medication for a Patient Associated with the Cabinet
7320
Automatically Direct User to the ISB Storing the Unused Dispenser
7325
Receive Indication that the Previously Unused Dispenser of Topical Cream is Used for the Patient
7330
Assign the Used Dispenser of Topical Cream for Exclusive Use of the Patient
7335
Assign PSB to the Patient for Storage of the Dispenser, the PSB Exclusive of Single-Use Items Assigned to Patient
7340
Retain the Multi-Use Designation During a Transfer Between Cabinets
7345
Receive Request from a User at the Cabinet to Obtain Topical Cream Medication for the Patient
7350
Automatically Direct User to the PSB Storing the Used Dispenser
7355
Determine that the Topical Cream Medication is not Used Up and Direct Storage in the PSB
7360
Exclude the Topical Cream Medication from Restocking at the PSB
7365
Track Use of the Dispenser of Topical Cream Medication by the Patient at the PSB
7370
Determine that the Topical Cream Use Exceeds a Threshold
7375
Direct a Restock of an Unused Dispenser at the ISB
7380
Receive Notice of Discharge Before the Dispenser of Topical Cream is Used Up
7385
Direct User to Provide Used Dispenser to the Patient Upon Discharge
7390
7300

FIG. 43

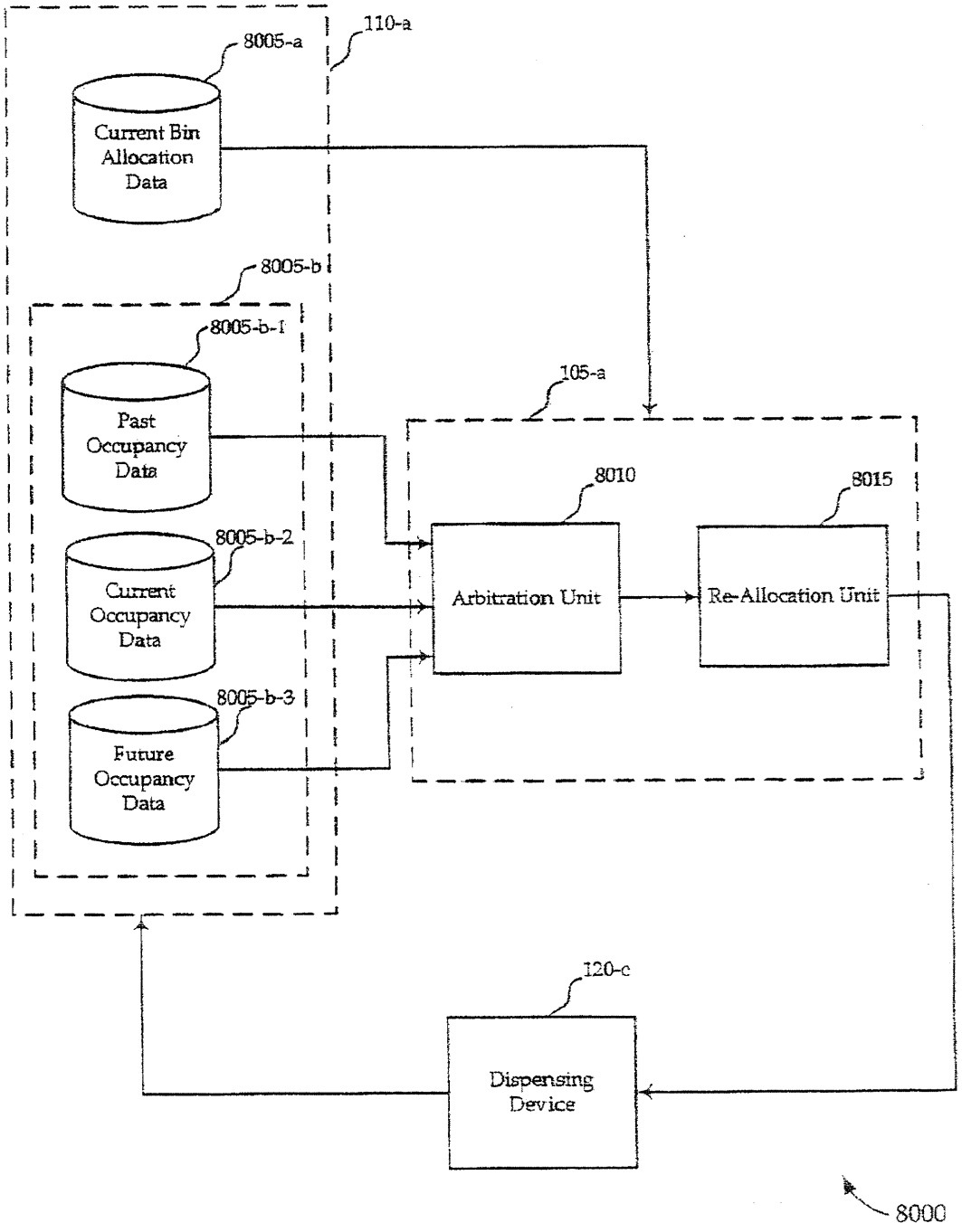

110-a
8005-a
Current Bin Allocation Data
8005-b
8005-b-1
Past Occupancy Data
105-a
8010
8015
8005-b-2
Current Occupancy Data
Arbitration Unit
Re-Allocation Unit
8005-b-3
Future Occupancy Data
120-c
Dispensing Device
8000

FIG. 44

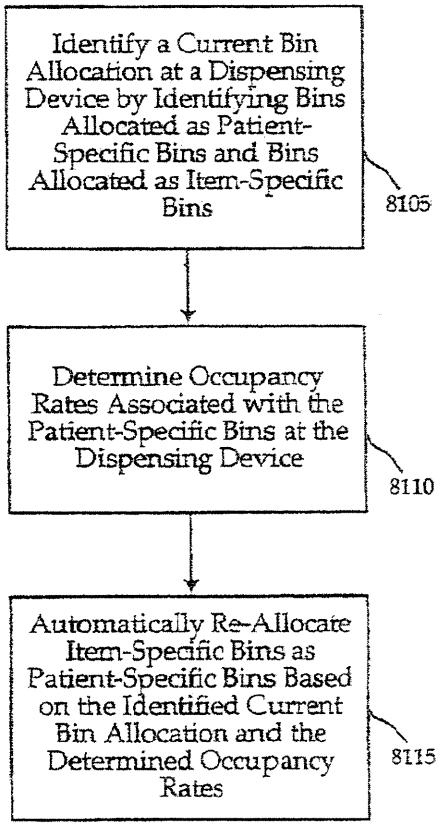

Identify a Current Bin Allocation at a Dispensing Device by Identifying Bins Allocated as Patient-Specific Bins and Bins Allocated as Item-Specific Bins
8105
Determine Occupancy Rates Associated with the Patient-Specific Bins at the Dispensing Device
8110
Automatically Re-Allocate Item-Specific Bins as Patient-Specific Bins Based on the Identified Current Bin Allocation and the Determined Occupancy Rates
8115
8100

FIG. 45

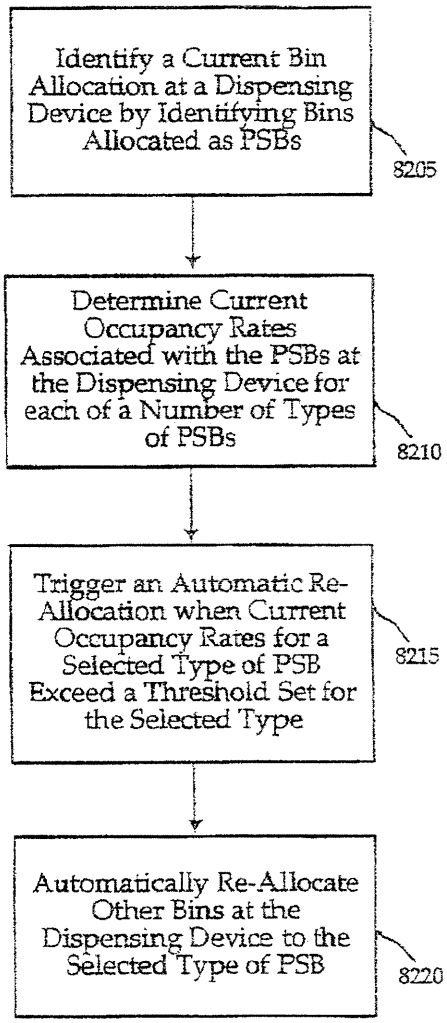

Identify a Current Bin Allocation at a Dispensing Device by Identifying Bins Allocated as PSBs
8205
Determine Current Occupancy Rates Associated with the PSBs at the Dispensing Device for each of a Number of Types of PSBs
8210
Trigger an Automatic Re-Allocation when Current Occupancy Rates for a Selected Type of PSB Exceed a Threshold Set for the Selected Type
8215
Automatically Re-Allocate Other Bins at the Dispensing Device to the Selected Type of PSB
8220
8200

FIG. 46

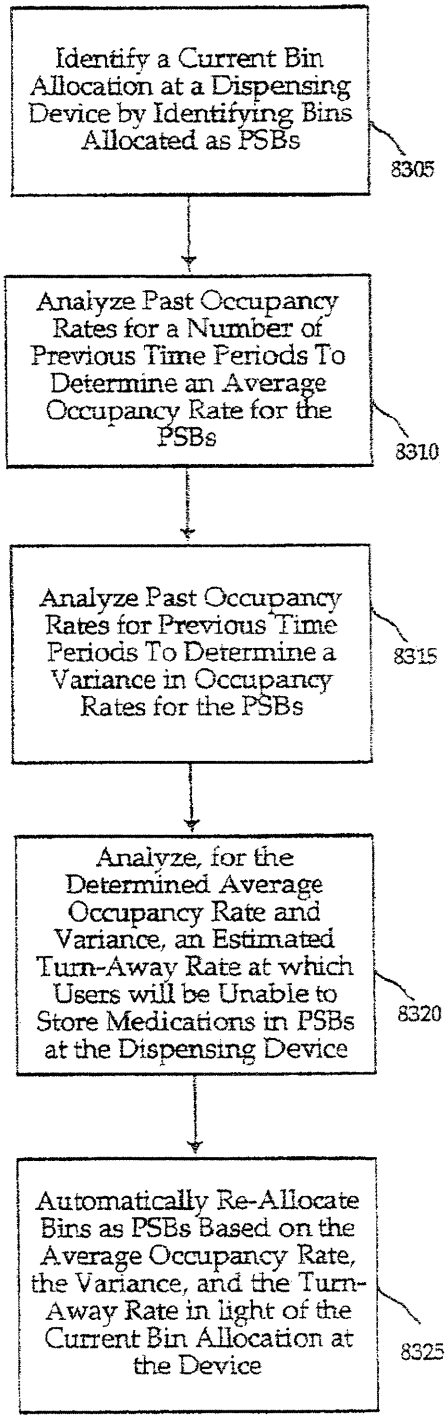

Identify a Current Bin Allocation at a Dispensing Device by Identifying Bins Allocated as PSBs
8305
Analyze Past Occupancy Rates for a Number of Previous Time Periods To Determine an Average Occupancy Rate for the PSBs
8310
Analyze Past Occupancy Rates for Previous Time Periods To Determine a Variance in Occupancy Rates for the PSBs
8315
Analyze, for the Determined Average Occupancy Rate and Variance, an Estimated Turn-Away Rate at which Users will be Unable to Store Medications in PSBs at the Dispensing Device
8320
Automatically Re-Allocate Bins as PSBs Based on the Average Occupancy Rate, the Variance, and the Turn-Away Rate in light of the Current Bin Allocation at the Device
8325
8300

FIG. 47

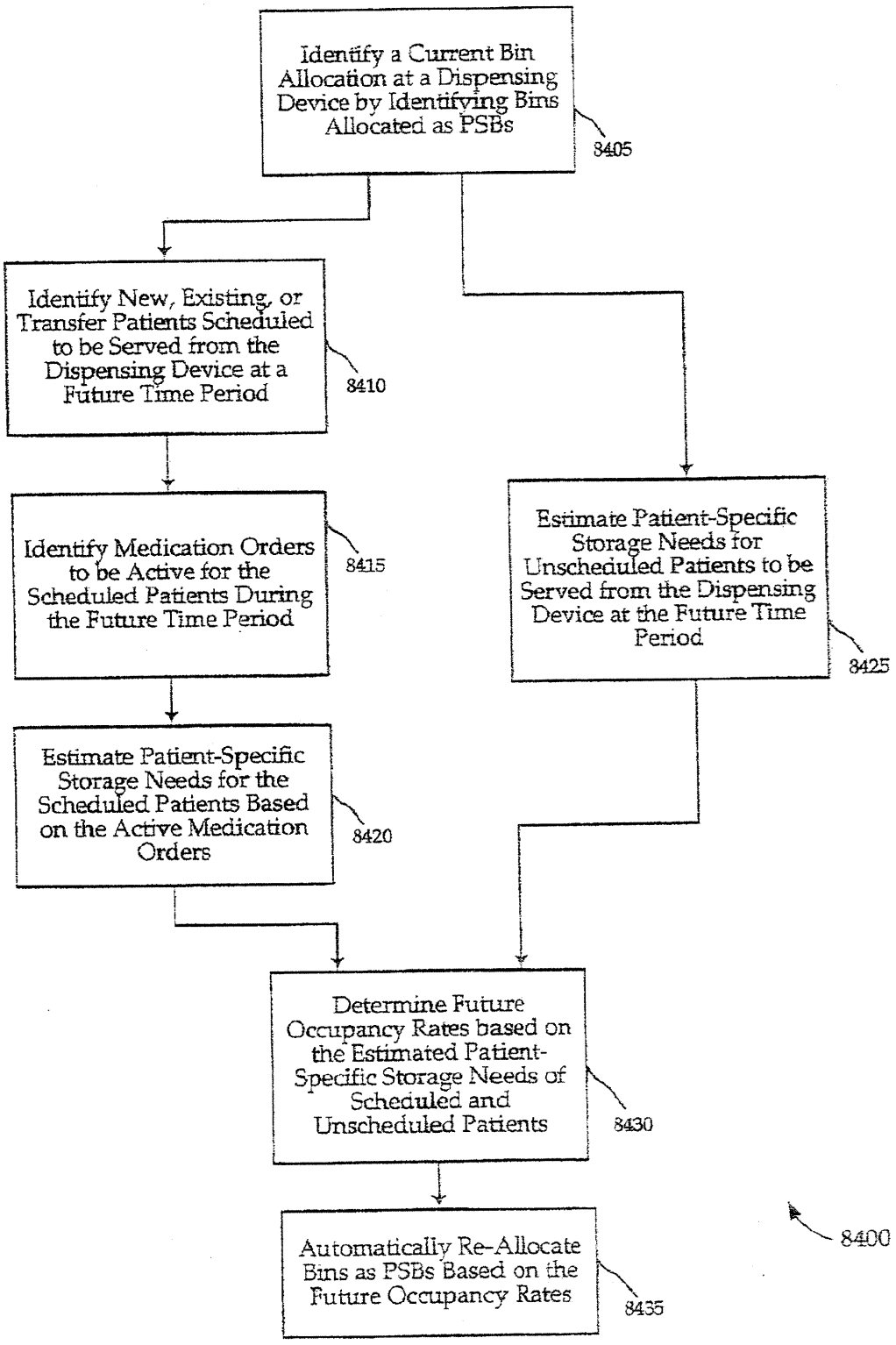

Identify a Current Bin Allocation at a Dispensing Device by Identifying Bins Allocated as PSBs
8405
Identify New, Existing, or Transfer Patients Scheduled to be Served from the Dispensing Device at a Future Time Period
8410
Identify Medication Orders to be Active for the Scheduled Patients During the Future Time Period
8415
Estimate Patient-Specific Storage Needs for the Scheduled Patients Based on the Active Medication Orders
8420
Estimate Patient-Specific Storage Needs for Unscheduled Patients to be Served from the Dispensing Device at the Future Time Period
8425
Determine Future Occupancy Rates based on the Estimated Patient-Specific Storage Needs of Scheduled and Unscheduled Patients
8430
Automatically Re-Allocate Bins as PSBs Based on the Future Occupancy Rates
8435
8400

FIG. 48

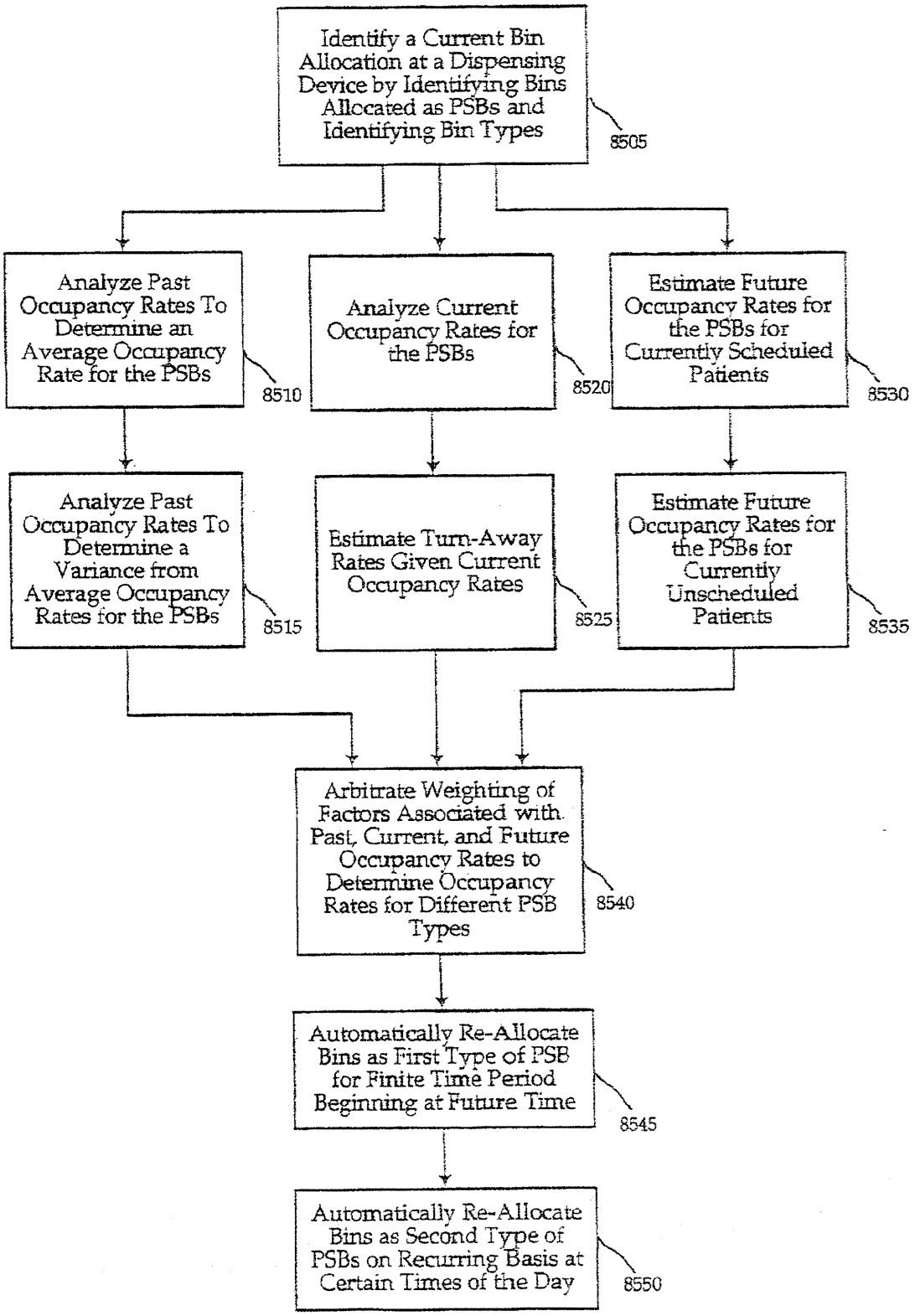

Identify a Current Bin Allocation at a Dispensing Device by Identifying Bins Allocated as PSBs and Identifying Bin Types
8505
Analyze Past Occupancy Rates To Determine an Average Occupancy Rate for the PSBs
8510
Analyze Current Occupancy Rates for the PSBs
8520
Estimate Future Occupancy Rates for the PSBs for Currently Scheduled Patients
8530
Analyze Past Occupancy Rates To Determine a Variance from Average Occupancy Rates for the PSBs
8515
Estimate Turn-Away Rates Given Current Occupancy Rates
8525
Estimate Future Occupancy Rates for the PSBs for Currently Unscheduled Patients
8535
Arbitrate Weighting of Factors Associated with Past, Current, and Future Occupancy Rates to Determine Occupancy Rates for Different PSB Types
8540
Automatically Re-Allocate Bins as First Type of PSB for Finite Time Period Beginning at Future Time
8545
Automatically Re-Allocate Bins as Second Type of PSBs on Recurring Basis at Certain Times of the Day
8550
8500

FIG. 49

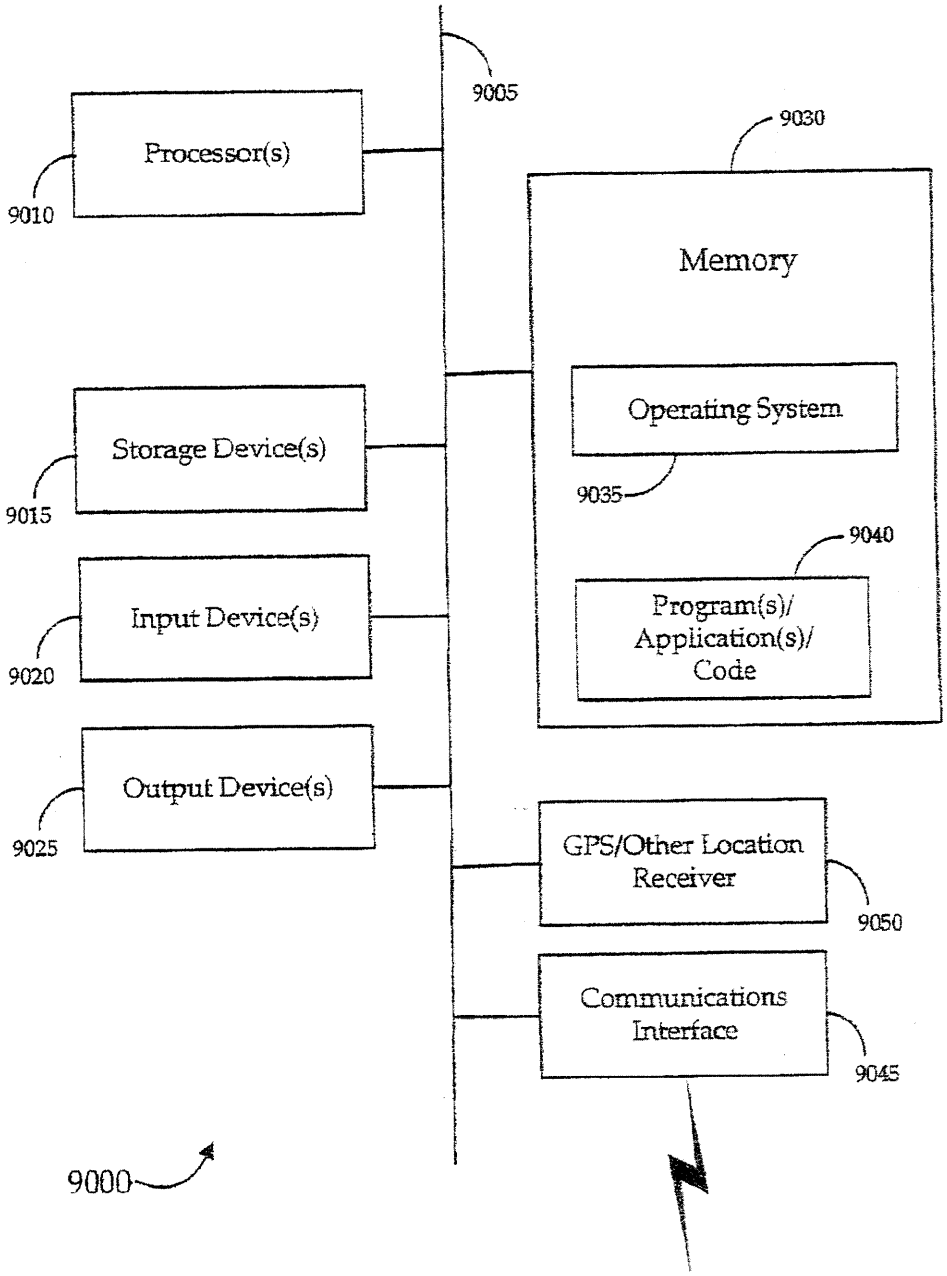

9005
Processor(s)
9010
9030
Memory
Operating System
9035
9040
Program(s)/
Application(s)/
Code
Storage Device(s)
9015
Input Device(s)
9020
Output Device(s)
9025
GPS/Other Location
Receiver
9050
Communications
Interface
9045
9000

FIG. 50