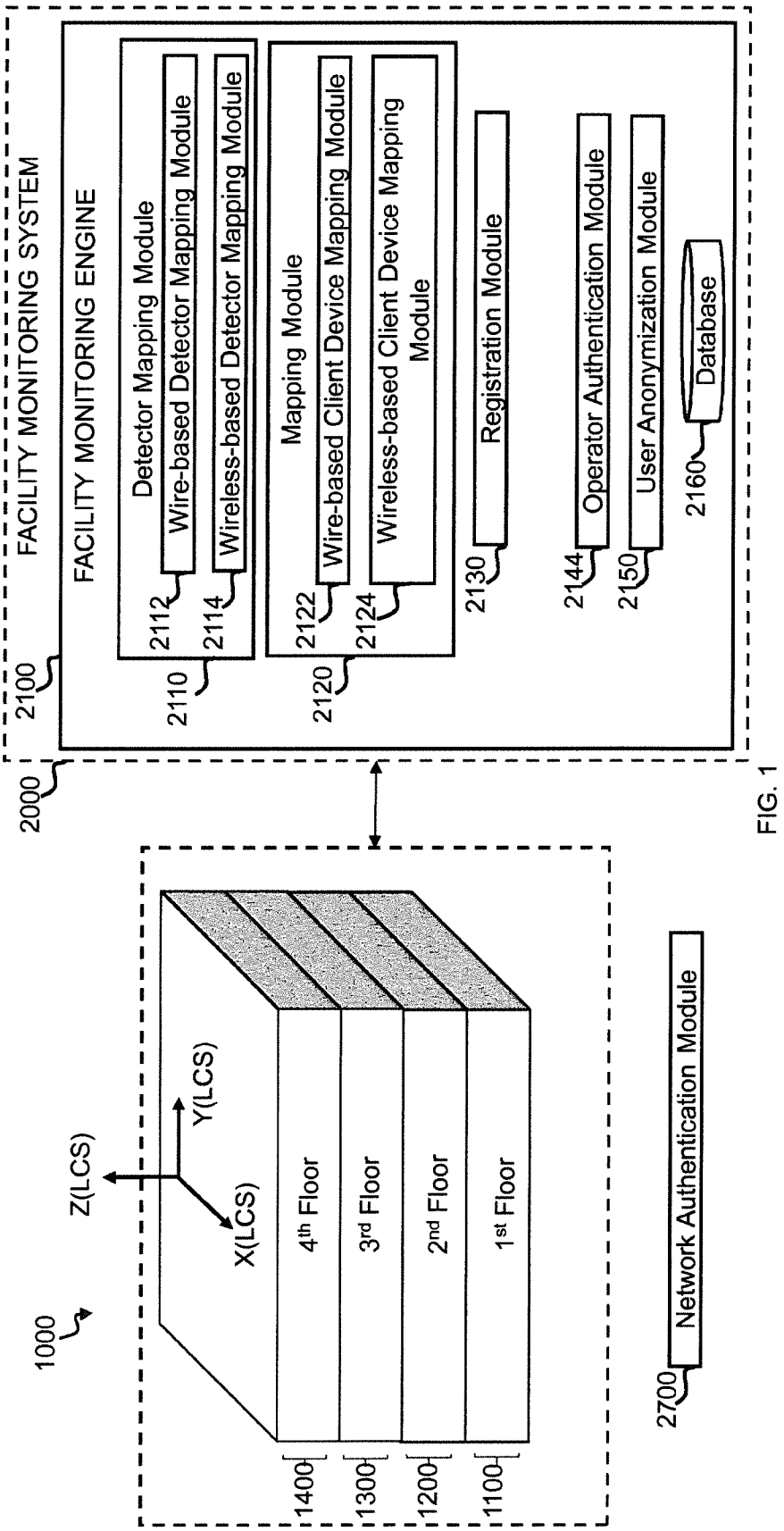

2000
FACILITY MONITORING SYSTEM
2100
FACILITY MONITORING ENGINE
Detector Mapping Module
2110
Wire-based Detector Mapping Module
2112
Wireless-based Detector Mapping Module
2114
Mapping Module
2120
Wire-based Client Device Mapping Module
2122
Wireless-based Client Device Mapping Module
2124
Registration Module
2130
Operator Authentication Module
2144
User Anonymization Module
2150
Database
2160
1000
Z(LCS)
Y(LCS)
X(LCS)
4th Floor
3rd Floor
2nd Floor
1st Floor
1400
1300
1200
1100
Network Authentication Module
2700

FIG. 1

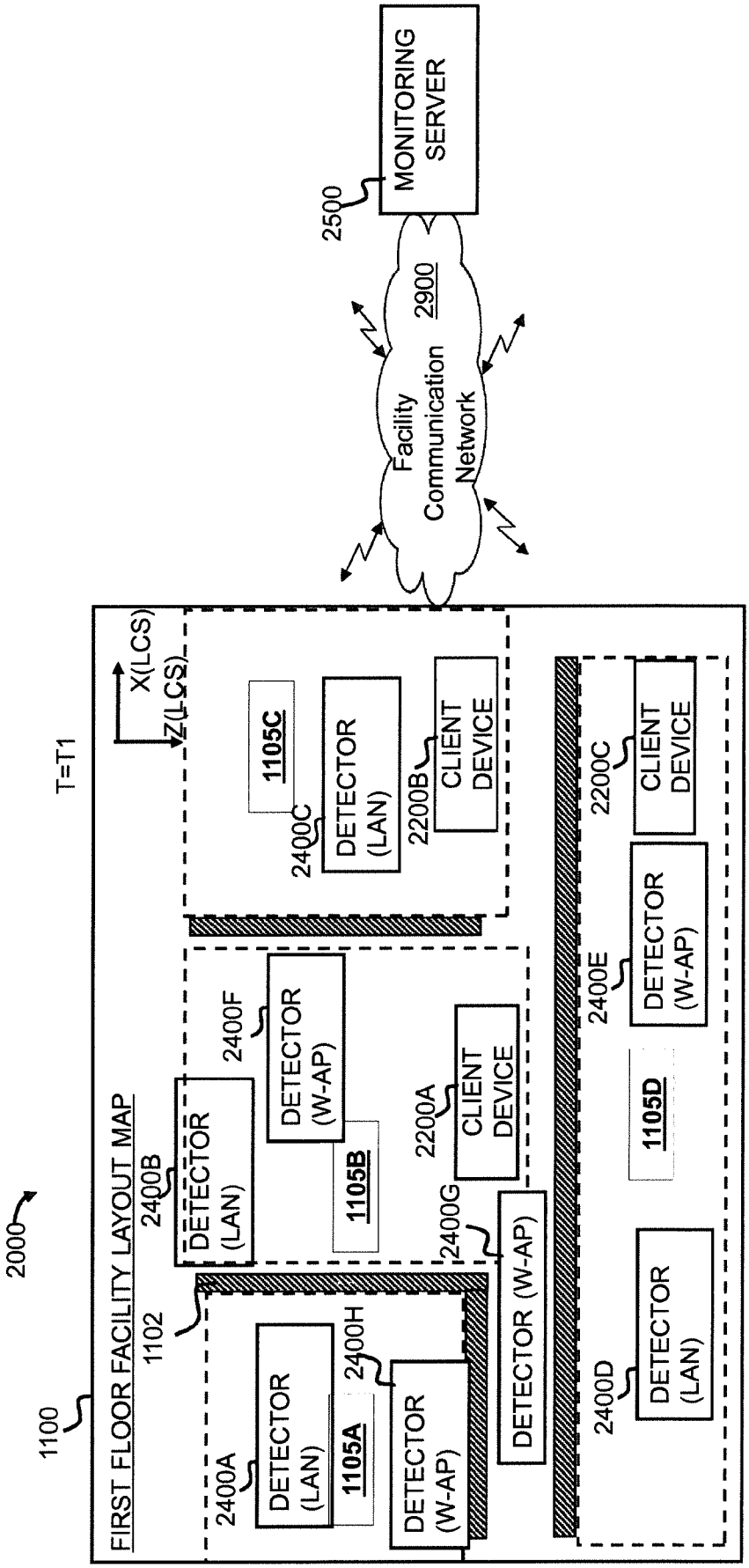

MONITORING SERVER
2500
Facility Communication Network 2900
2000
1100
FIRST FLOOR FACILITY LAYOUT MAP
T=T1
X(LCS)
Z(LCS)
1102
2400A
DETECTOR (LAN)
1105A
2400H
DETECTOR (W-AP)
DETECTOR (W-AP)
2400G
2400B
DETECTOR (LAN)
2400F
DETECTOR (W-AP)
1105B
2200A
CLIENT DEVICE
1105C
2400C
DETECTOR (LAN)
2200B
CLIENT DEVICE
2400D
DETECTOR (LAN)
1105D
2400E
DETECTOR (W-AP)
2200C
CLIENT DEVICE

FIG. 2

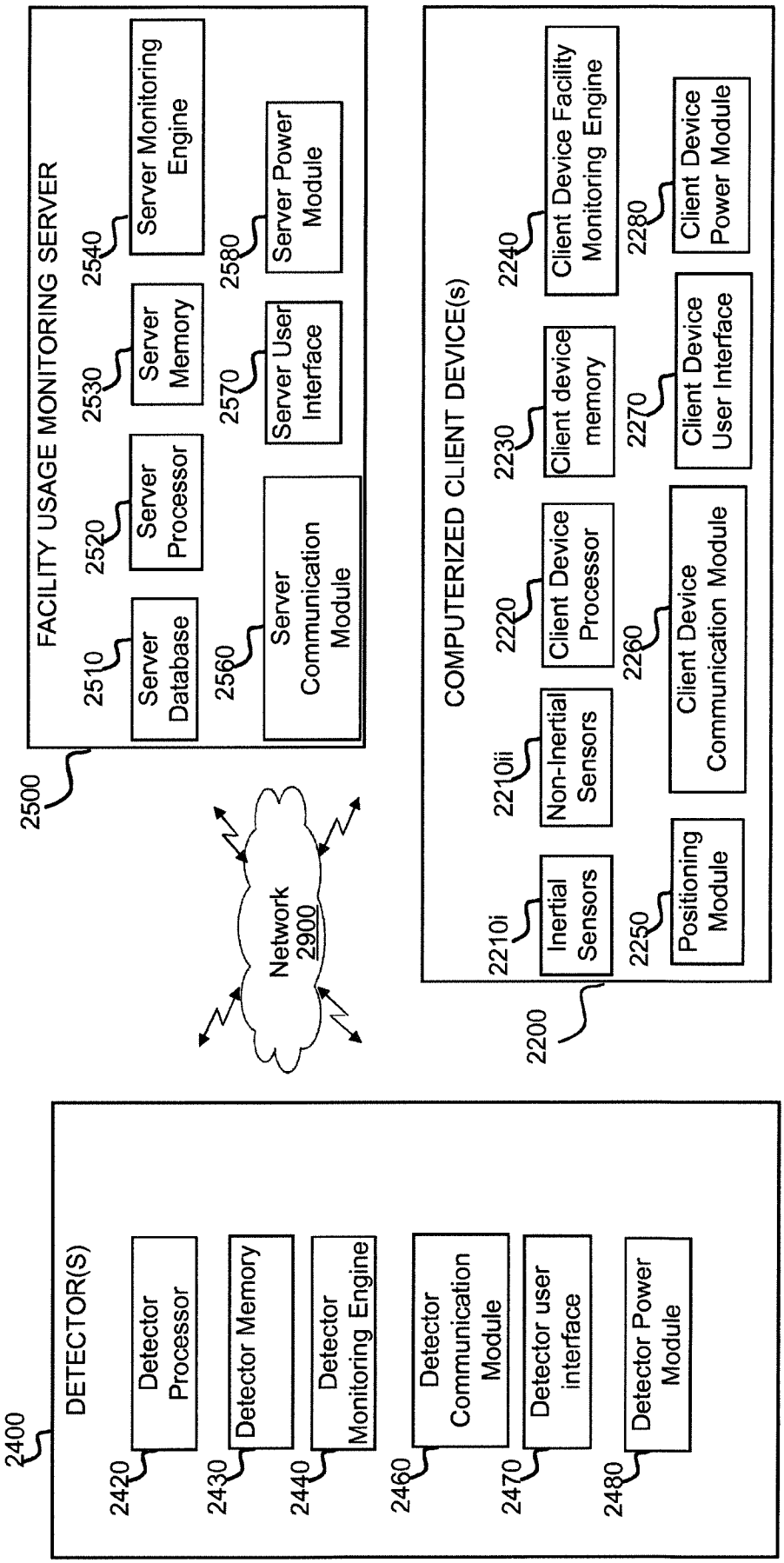

2400
DETECTOR(S)
2420
Detector Processor
2430
Detector Memory
2440
Detector Monitoring Engine
2460
Detector Communication Module
2470
Detector user interface
2480
Detector Power Module
2500
FACILITY USAGE MONITORING SERVER
2510
Server Database
2520
Server Processor
2530
Server Memory
2540
Server Monitoring Engine
2560
Server Communication Module
2570
Server User Interface
2580
Server Power Module
Network 2900
2200
COMPUTERIZED CLIENT DEVICE(s)
2210i
Inertial Sensors
2210ii
Non-Inertial Sensors
2220
Client Device Processor
2230
Client device memory
2240
Client Device Facility Monitoring Engine
2250
Positioning Module
2260
Client Device Communication Module
2270
Client Device User Interface
2280
Client Device Power Module

FIG. 3

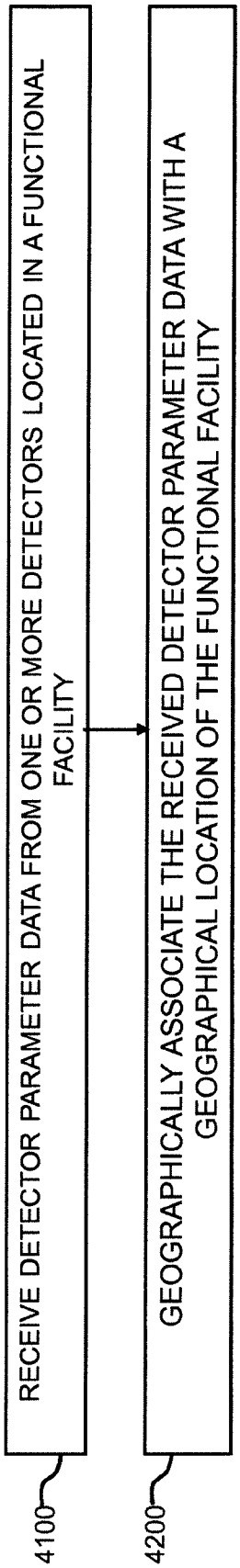

RECEIVE DETECTOR PARAMETER DATA FROM ONE OR MORE DETECTORS LOCATED IN A FUNCTIONAL FACILITY
GEOGRAPHICALLY ASSOCIATE THE RECEIVED DETECTOR PARAMETER DATA WITH A GEOGRAPHICAL LOCATION OF THE FUNCTIONAL FACILITY
4100
4200

FIG. 4

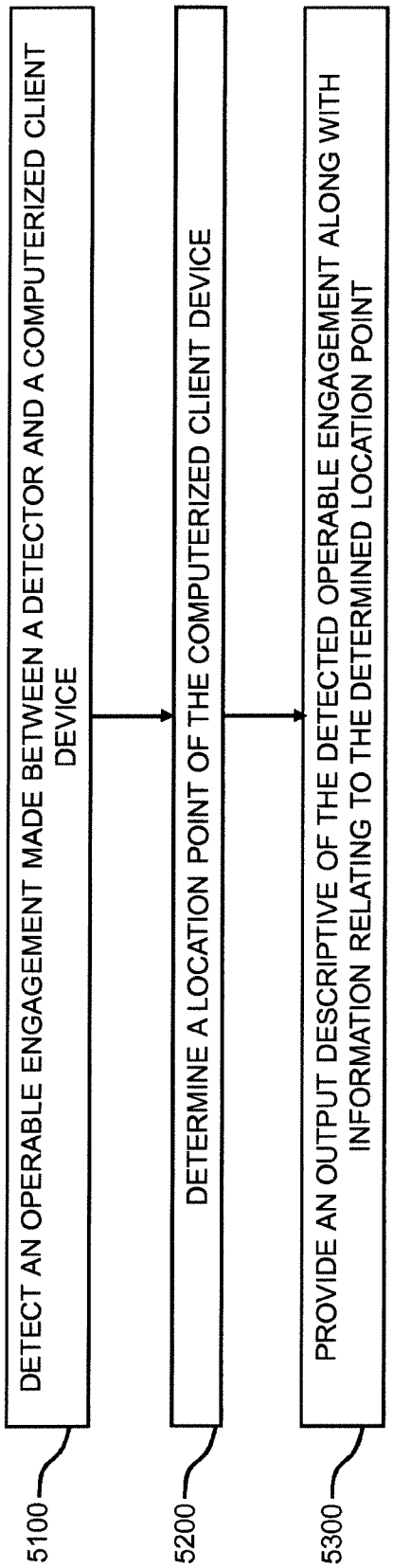

DETECT AN OPERABLE ENGAGEMENT MADE BETWEEN A DETECTOR AND A COMPUTERIZED CLIENT DEVICE
DETERMINE A LOCATION POINT OF THE COMPUTERIZED CLIENT DEVICE
PROVIDE AN OUTPUT DESCRIPTIVE OF THE DETECTED OPERABLE ENGAGEMENT ALONG WITH INFORMATION RELATING TO THE DETERMINED LOCATION POINT
5100
5200
5300

FIG. 5

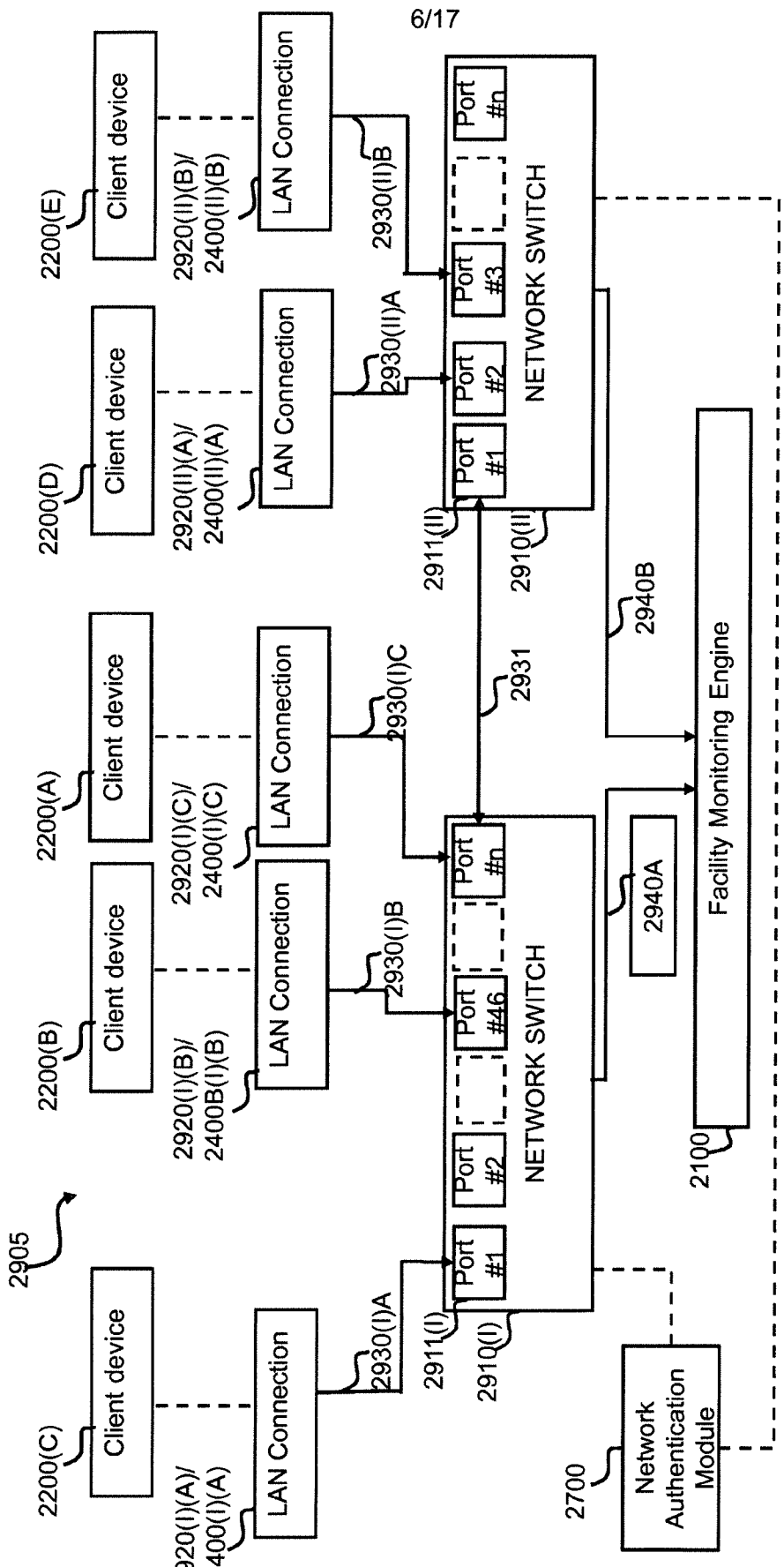

2905
2200(C)
Client device
2920(I)(A)/
2400(I)(A)
LAN Connection
2930(I)A
2911(I)
Port #1
Port #2
Port #46
Port #n
NETWORK SWITCH
2910(I)
2200(B)
Client device
2920(I)(B)/
2400B(I)(B)
LAN Connection
2930(I)B
2200(A)
Client device
2920(I)(C)/
2400(I)(C)
LAN Connection
2930(I)C
2931
2911(II)
Port #1
Port #2
Port #3
Port #n
NETWORK SWITCH
2910(II)
2200(D)
Client device
2920(II)(A)/
2400(II)(A)
LAN Connection
2930(II)A
2200(E)
Client device
2920(II)(B)/
2400(II)(B)
LAN Connection
2930(II)B
2940B
2940A
2100
Facility Monitoring Engine
2700
Network Authentication Module

FIG. 6

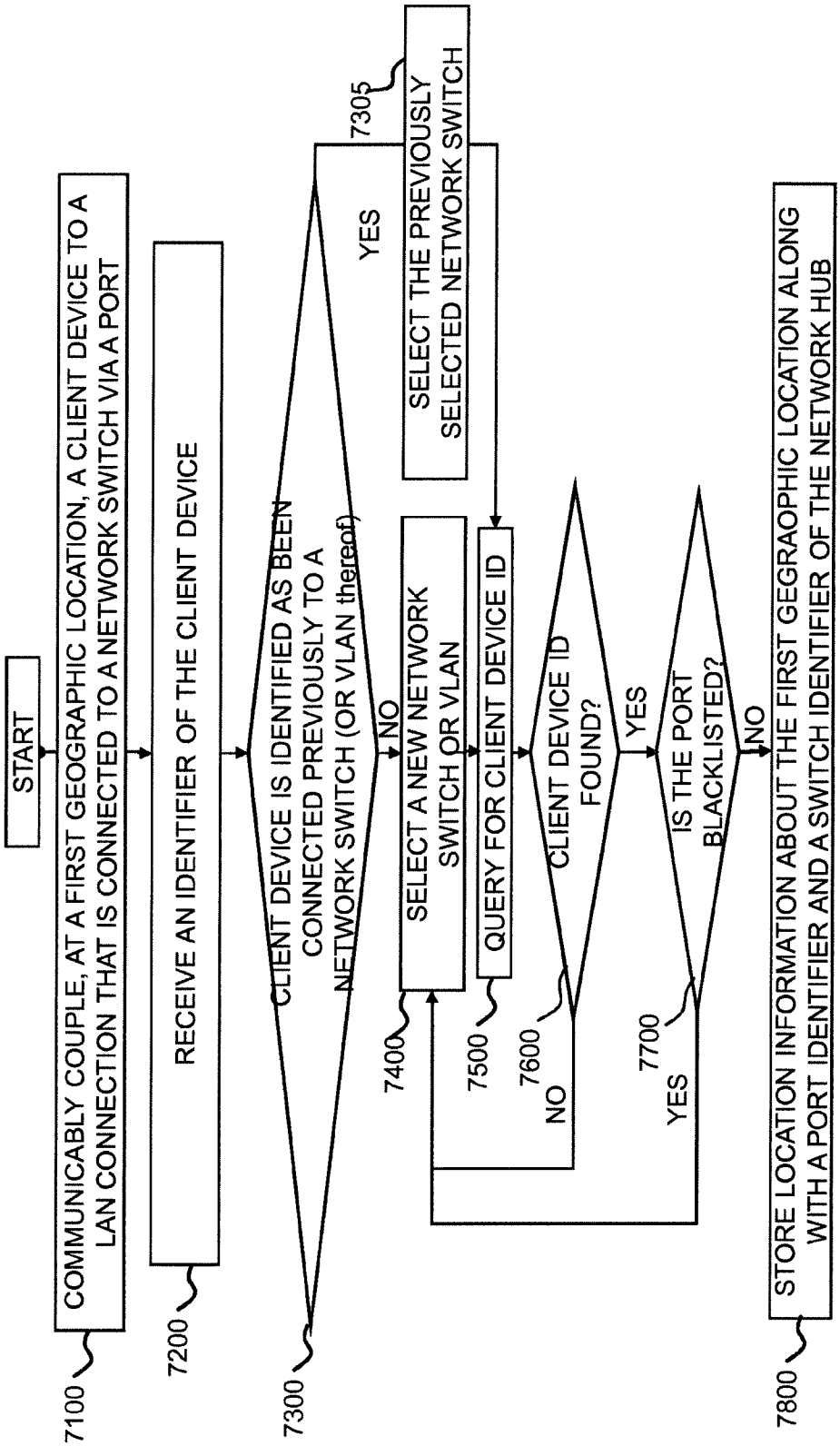

START
COMMUNICABLY COUPLE, AT A FIRST GEOGRAPHIC LOCATION, A CLIENT DEVICE TO A LAN CONNECTION THAT IS CONNECTED TO A NETWORK SWITCH VIA A PORT
7100
RECEIVE AN IDENTIFIER OF THE CLIENT DEVICE
7200
CLIENT DEVICE IS IDENTIFIED AS BEEN CONNECTED PREVIOUSLY TO A NETWORK SWITCH (OR VLAN thereof)
7300
YES
7305
SELECT THE PREVIOUSLY SELECTED NETWORK SWITCH
NO
7400
SELECT A NEW NETWORK SWITCH OR VLAN
7500
QUERY FOR CLIENT DEVICE ID
CLIENT DEVICE ID FOUND?
7600
NO
YES
IS THE PORT BLACKLISTED?
7700
YES
NO
STORE LOCATION INFORMATION ABOUT THE FIRST GEGRAOPHIC LOCATION ALONG WITH A PORT IDENTIFIER AND A SWITCH IDENTIFIER OF THE NETWORK HUB
7800

FIG. 7

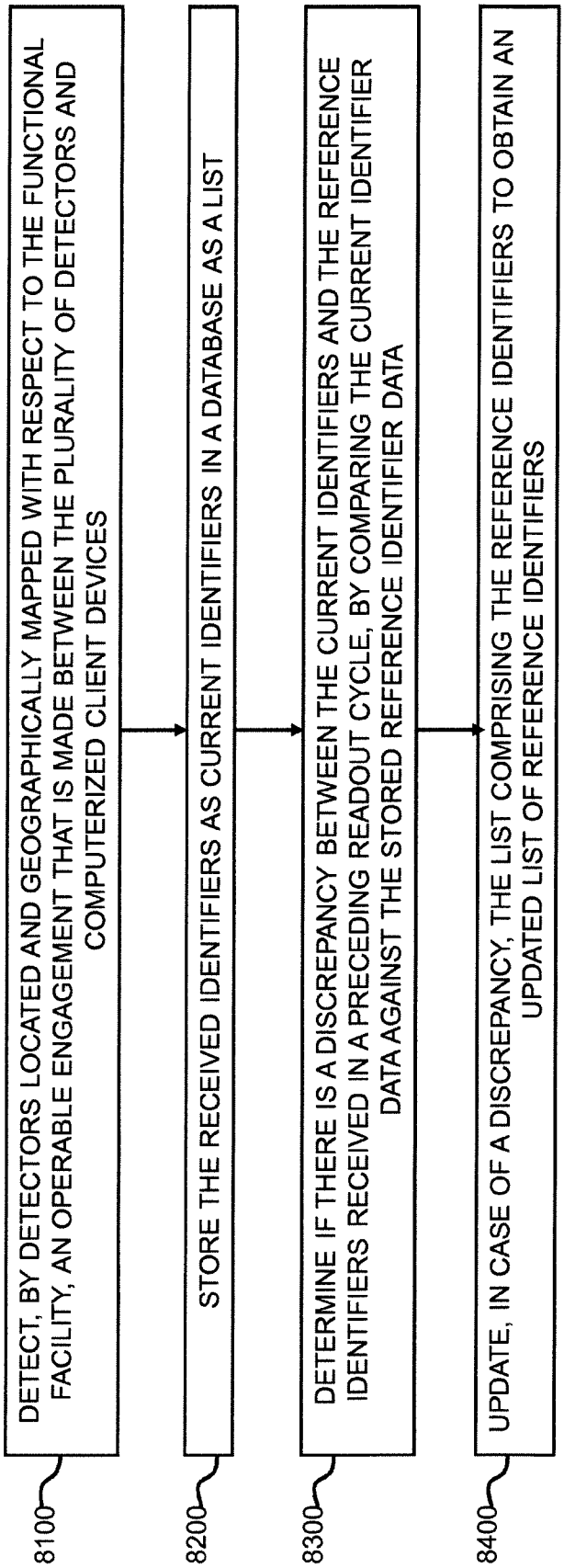

DETECT, BY DETECTORS LOCATED AND GEOGRAPHICALLY MAPPED WITH RESPECT TO THE FUNCTIONAL FACILITY, AN OPERABLE ENGAGEMENT THAT IS MADE BETWEEN THE PLURALITY OF DETECTORS AND COMPUTERIZED CLIENT DEVICES
8100
STORE THE RECEIVED IDENTIFIERS AS CURRENT IDENTIFIERS IN A DATABASE AS A LIST
8200
DETERMINE IF THERE IS A DISCREPANCY BETWEEN THE CURRENT IDENTIFIERS AND THE REFERENCE IDENTIFIERS RECEIVED IN A PRECEDING READOUT CYCLE, BY COMPARING THE CURRENT IDENTIFIER DATA AGAINST THE STORED REFERENCE IDENTIFIER DATA
8300
UPDATE, IN CASE OF A DISCREPANCY, THE LIST COMPRISING THE REFERENCE IDENTIFIERS TO OBTAIN AN UPDATED LIST OF REFERENCE IDENTIFIERS
8400

FIG. 8

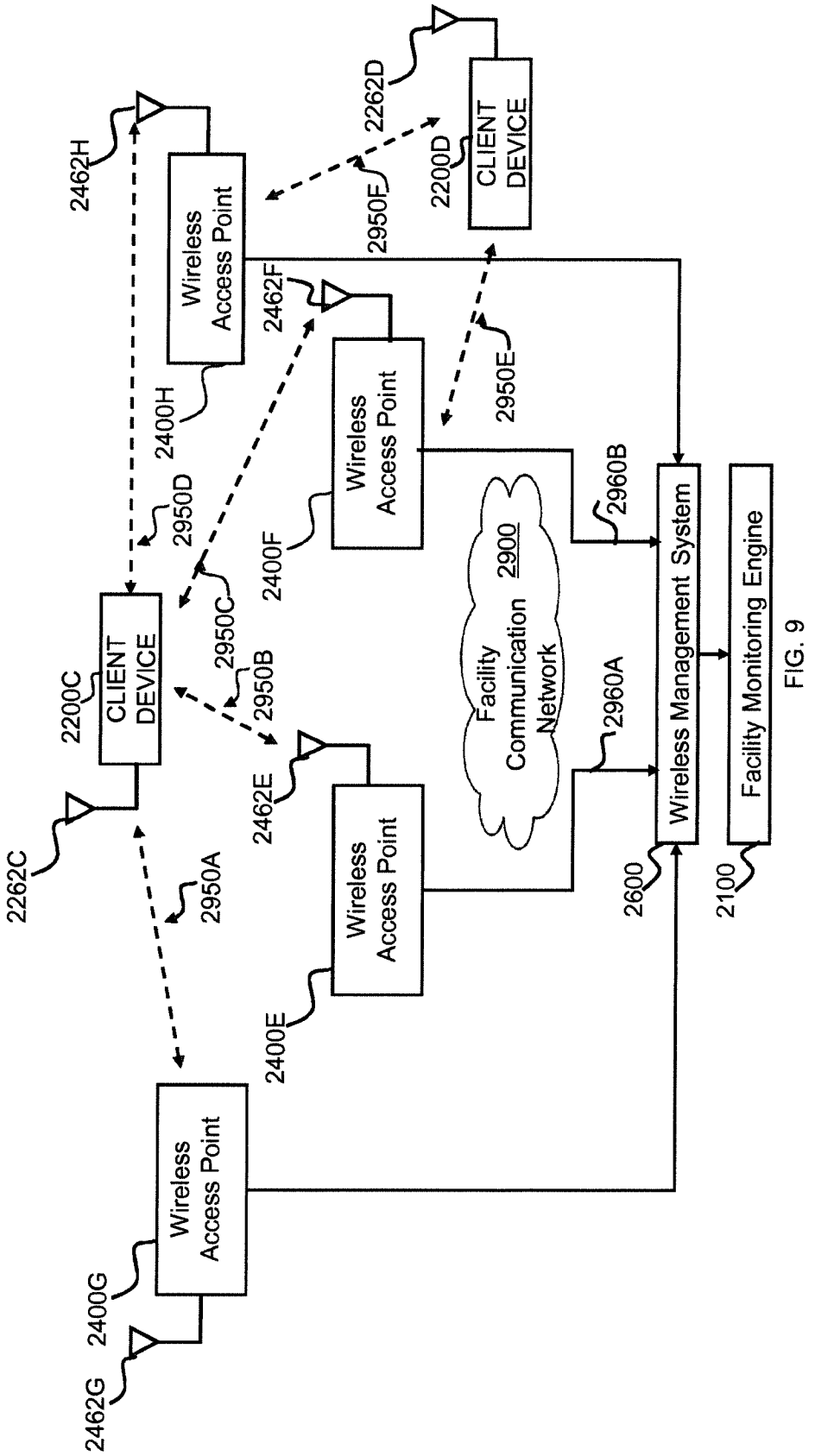

2462H
Wireless Access Point
2400H
2950D
2200C
CLIENT DEVICE
2262C
2950A
2462G
2400G
Wireless Access Point
2462E
2950B
2950C
2400E
Wireless Access Point
2462F
2950E
2400F
Wireless Access Point
2262D
2950F
2200D
CLIENT DEVICE
Facility Communication Network 2900
2960B
2960A
2600
Wireless Management System
2100
Facility Monitoring Engine

FIG. 9

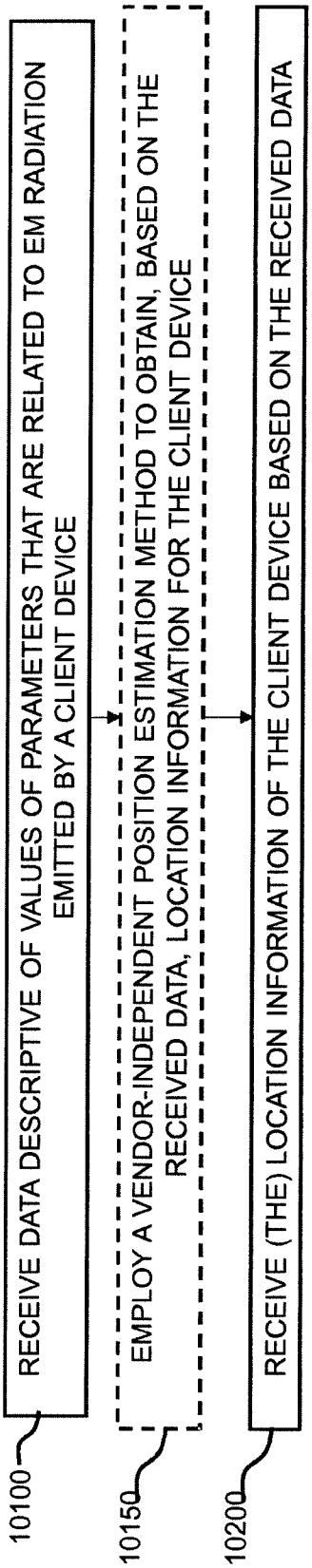


FIG. 10A

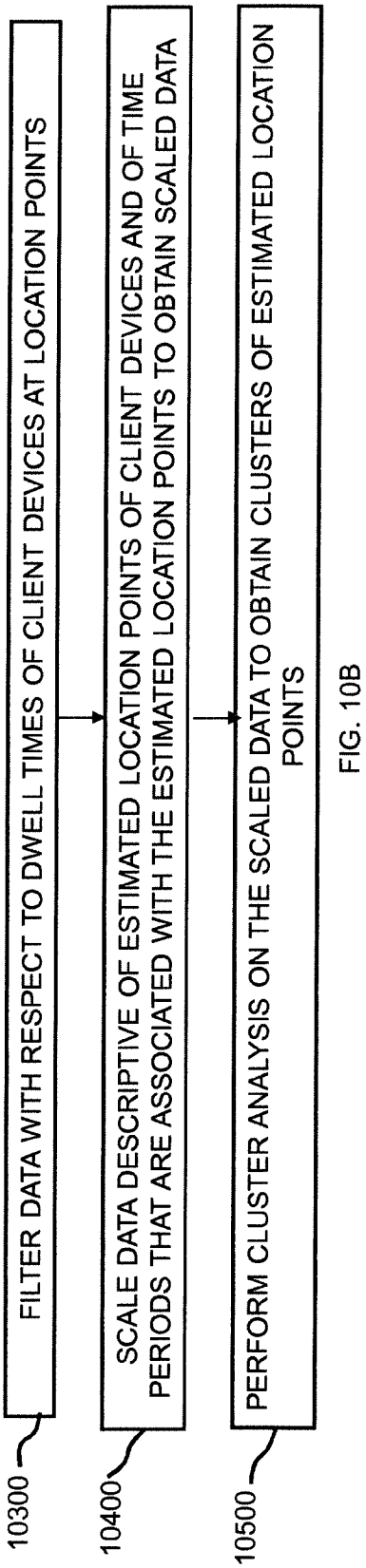


FIG. 10B

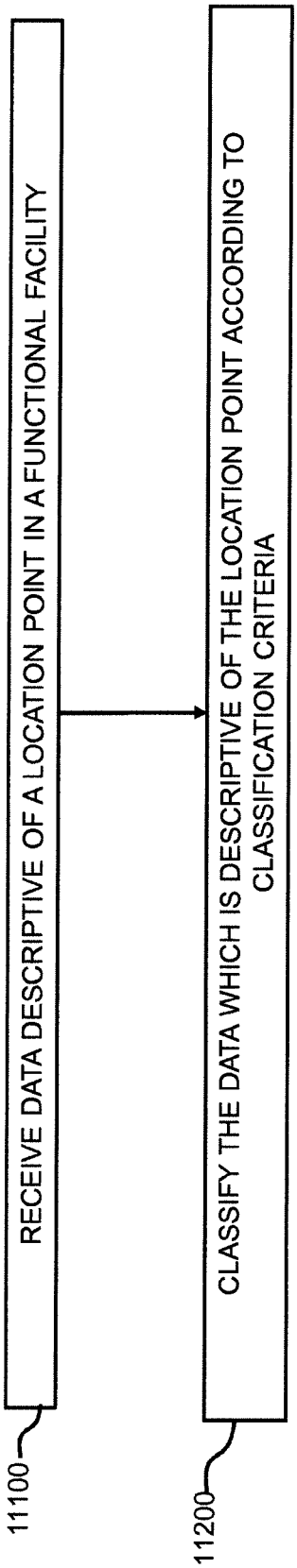

RECEIVE DATA DESCRIPTIVE OF A LOCATION POINT IN A FUNCTIONAL FACILITY
CLASSIFY THE DATA WHICH IS DESCRIPTIVE OF THE LOCATION POINT ACCORDING TO CLASSIFICATION CRITERIA
11100
11200

FIG. 11

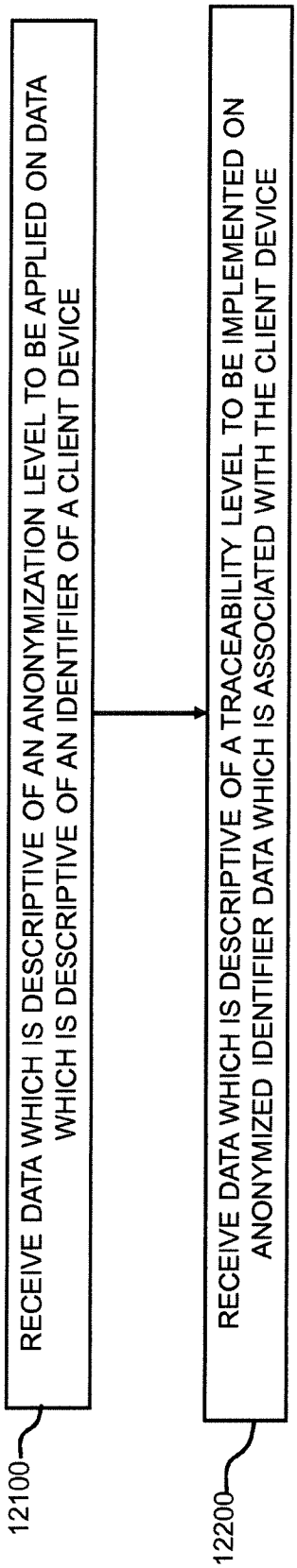

RECEIVE DATA WHICH IS DESCRIPTIVE OF AN ANONYMIZATION LEVEL TO BE APPLIED ON DATA WHICH IS DESCRIPTIVE OF AN IDENTIFIER OF A CLIENT DEVICE
12100
RECEIVE DATA WHICH IS DESCRIPTIVE OF A TRACEABILITY LEVEL TO BE IMPLEMENTED ON ANONYMIZED IDENTIFIER DATA WHICH IS ASSOCIATED WITH THE CLIENT DEVICE
12200

FIG. 12

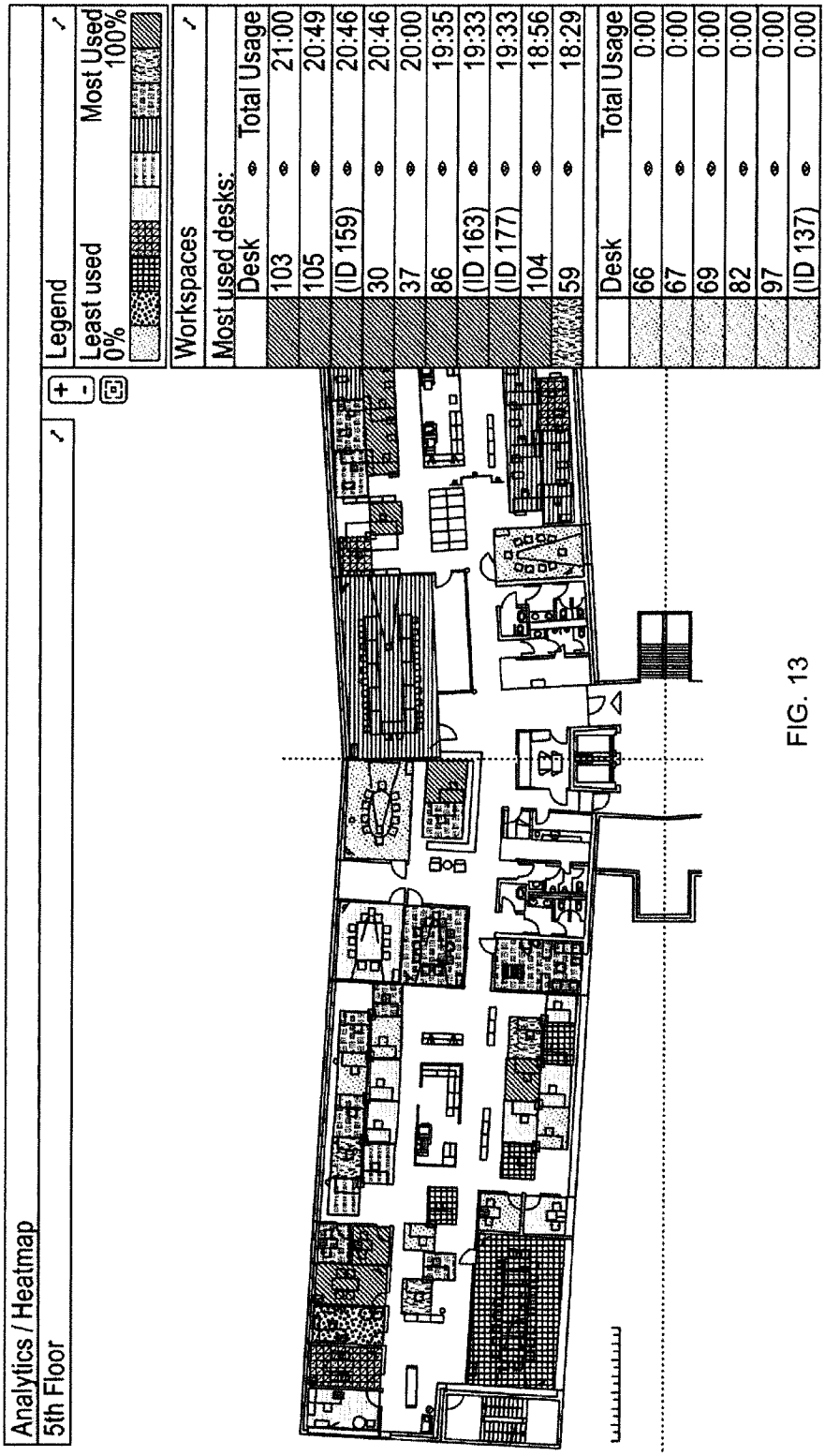

Analytics / Heatmap
5th Floor
Legend
Least used 0%
Most Used 100%
Workspaces
Most used desks:
Desk
Total Usage
103 21:00
105 20:49
(ID 159) 20:46
30 20:46
37 20:00
86 19:35
(ID 163) 19:33
(ID 177) 19:33
104 18:56
59 18:29
Desk
Total Usage
66 0:00
67 0:00
69 0:00
82 0:00
97 0:00
(ID 137) 0:00

FIG. 13

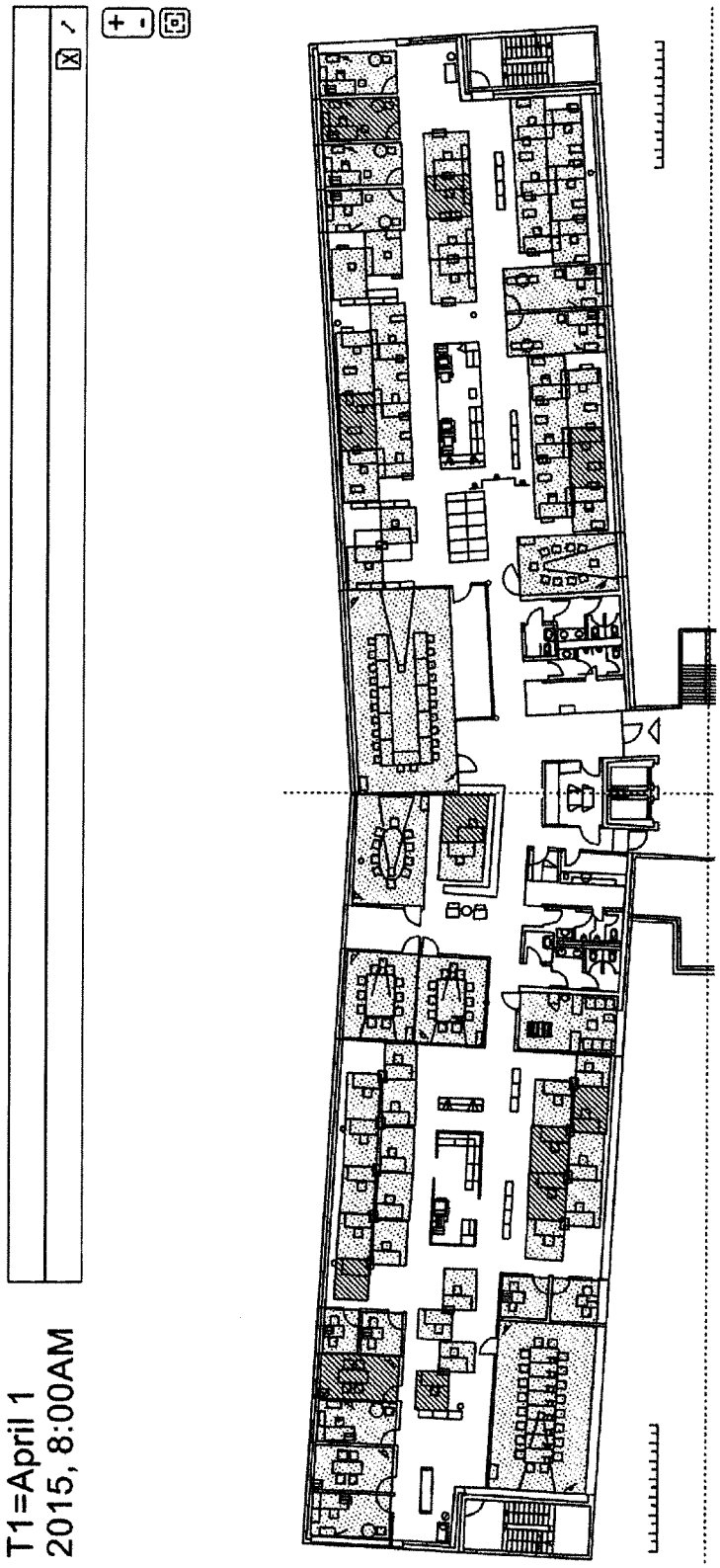


FIG. 14

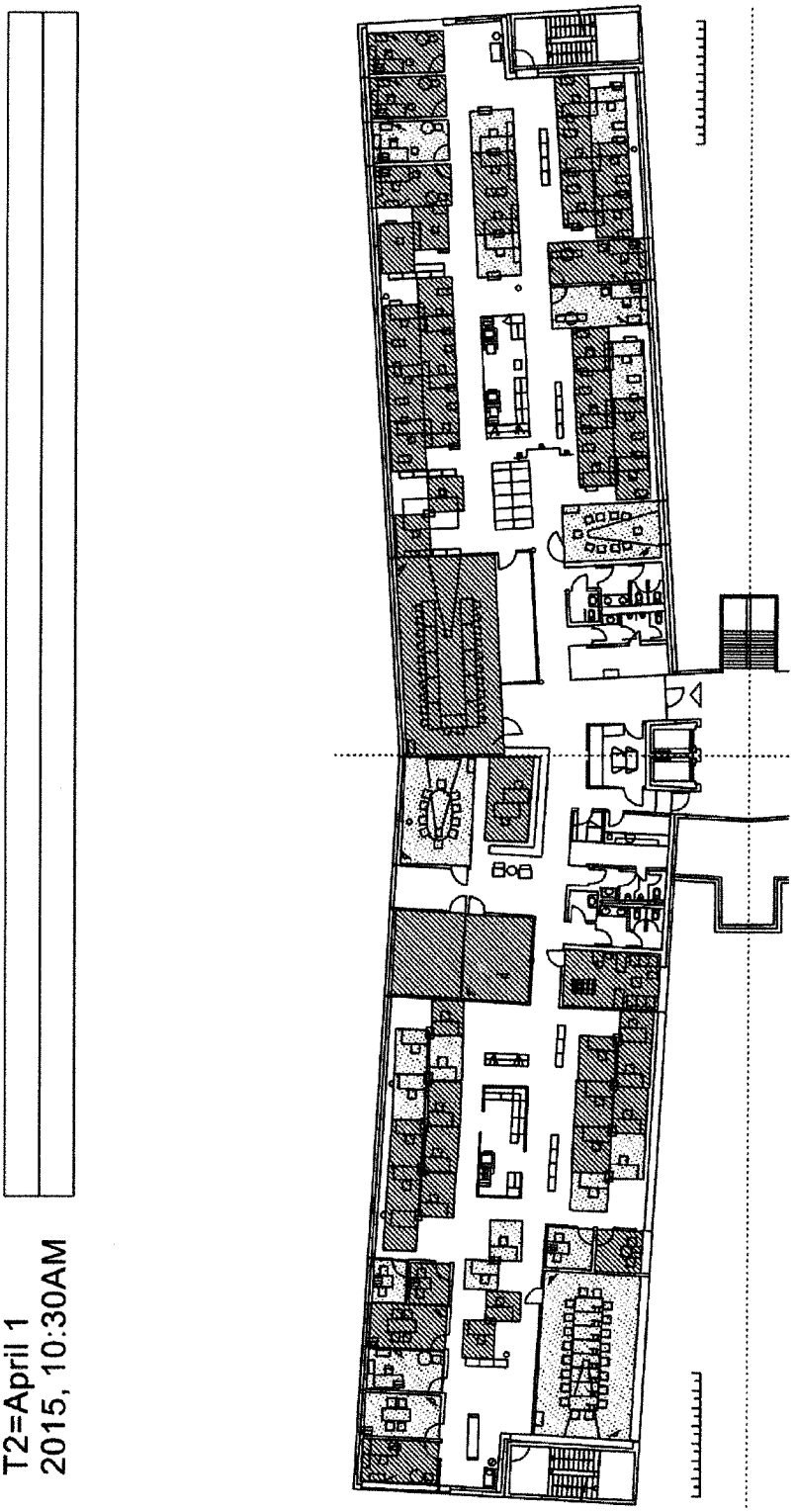


FIG. 15

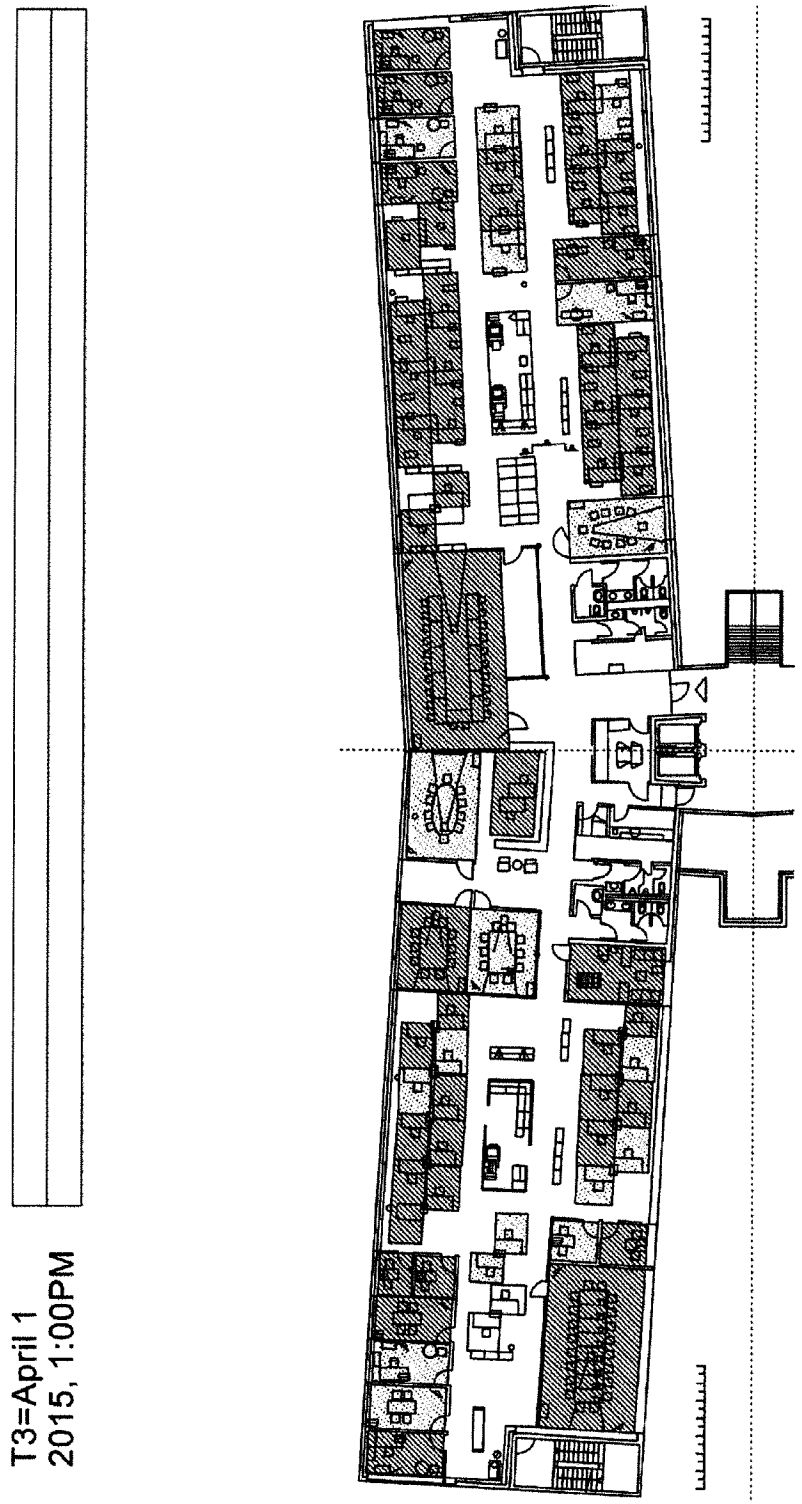


FIG. 16

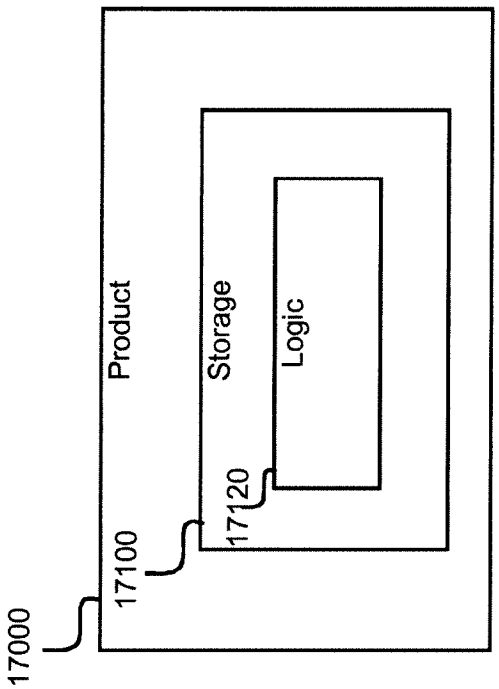


FIG. 17