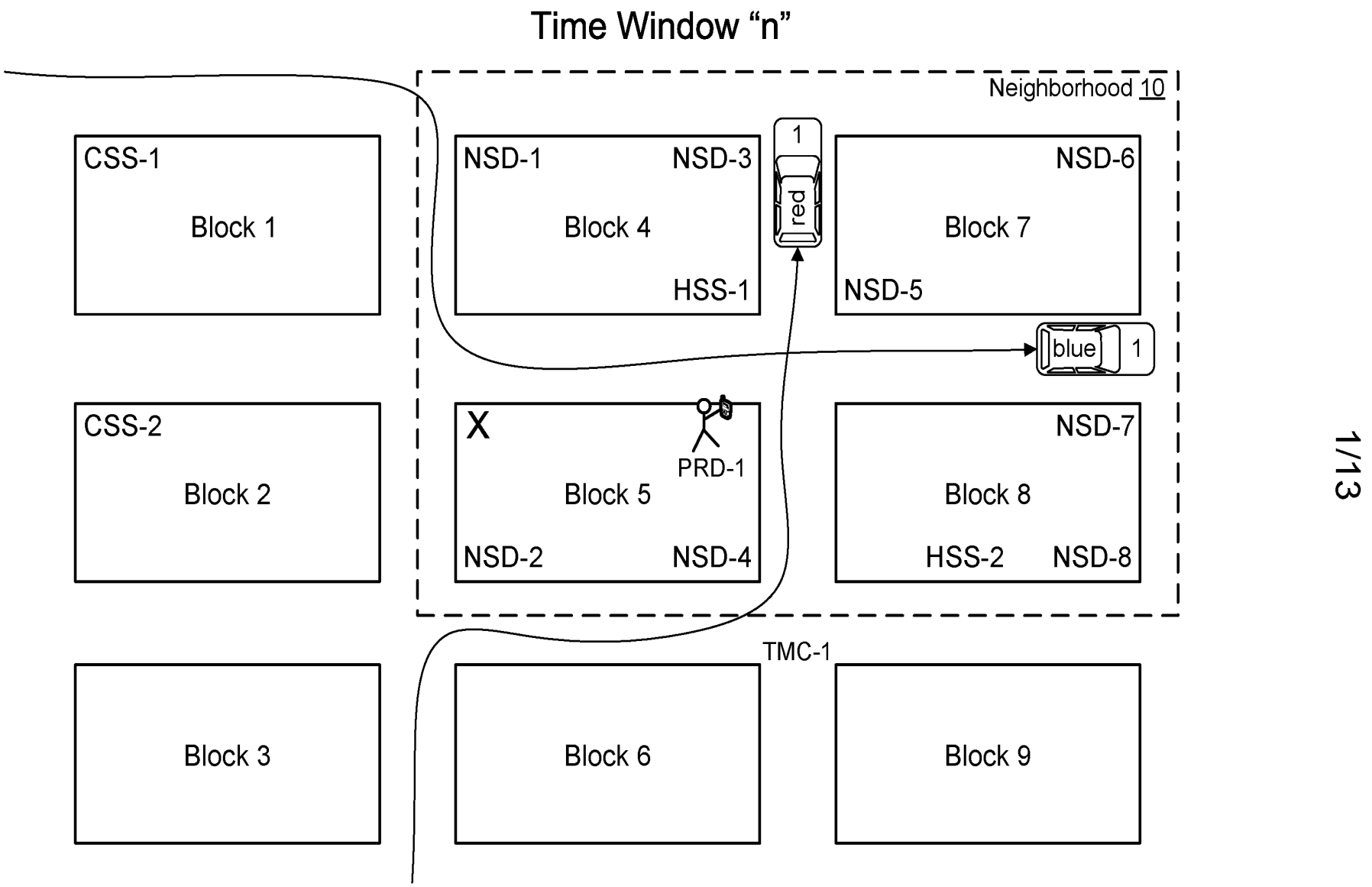
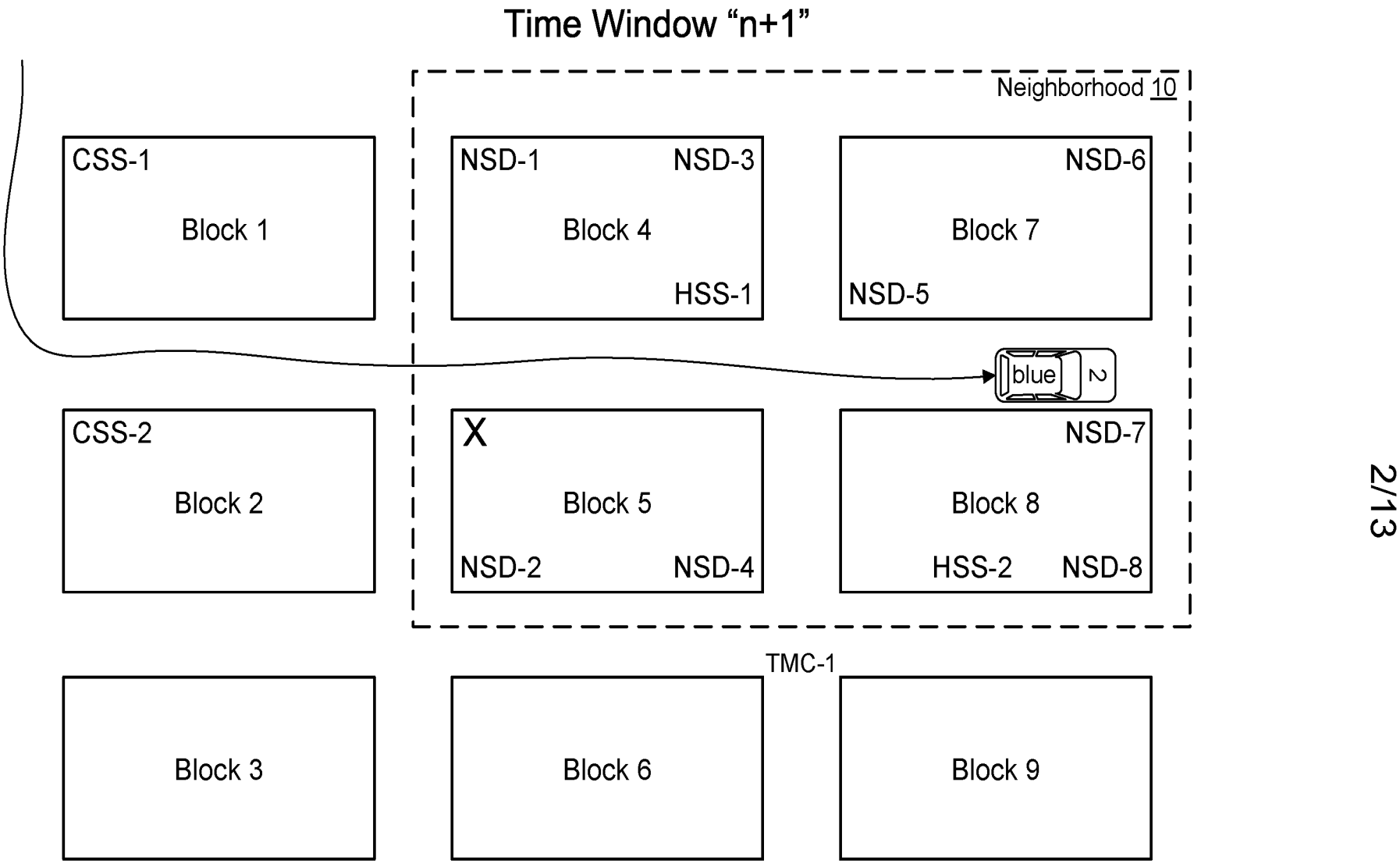


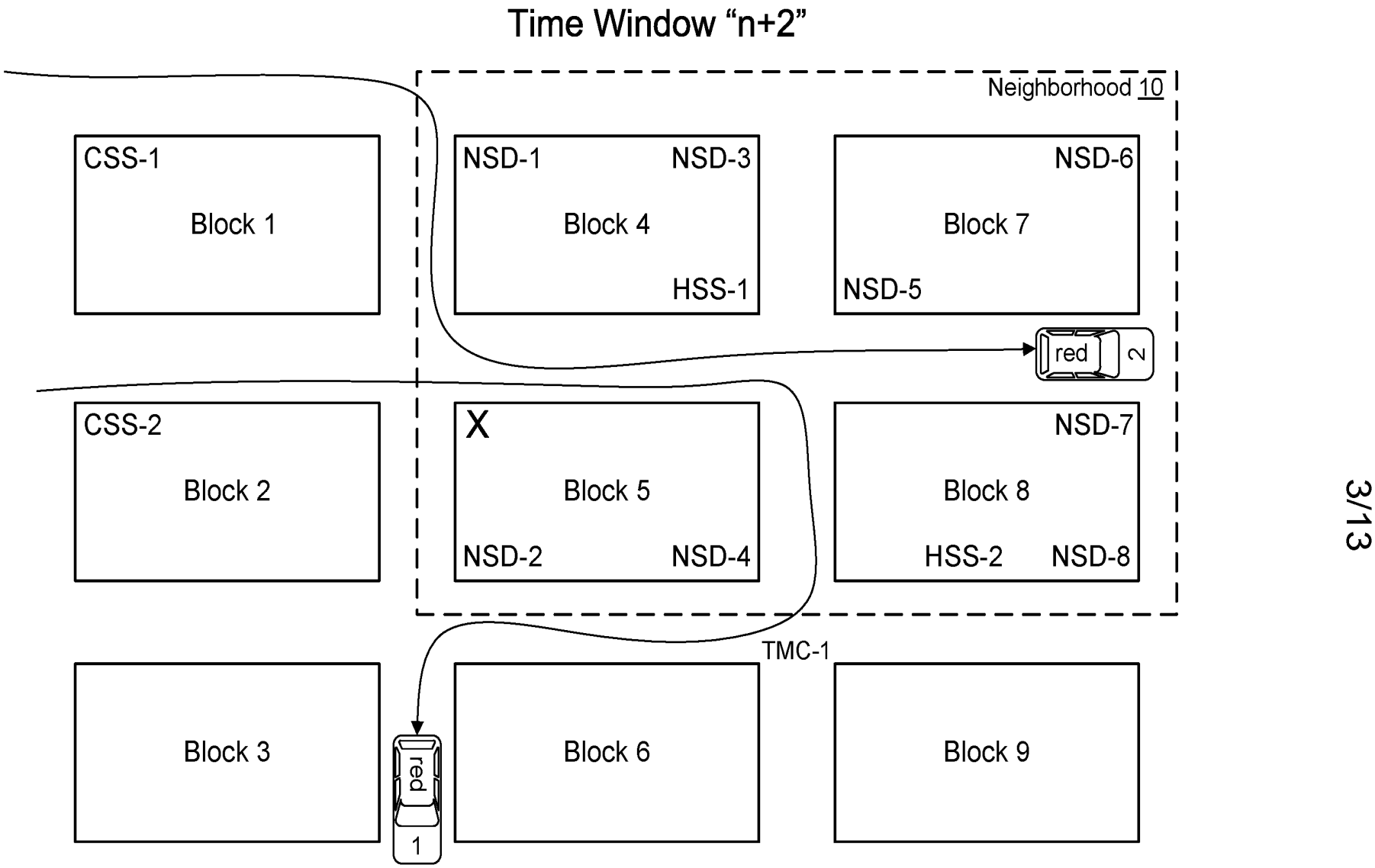
X = Burglary event
CSS = commercial security system
HSS = home security system
NSD = neighborhood surveillance device
PRD = portable recording device
TMC = traffic monitoring camera

FIG. 1A



X = Burglary event
CSS = commercial security system
HSS = home security system
NSD = neighborhood surveillance device
PRD = portable recording device
TMC = traffic monitoring camera

FIG. 1B



X = Burglary event
CSS = commercial security system
HSS = home security system
NSD = neighborhood surveillance device
PRD = portable recording device
TMC = traffic monitoring camera

FIG. 1C

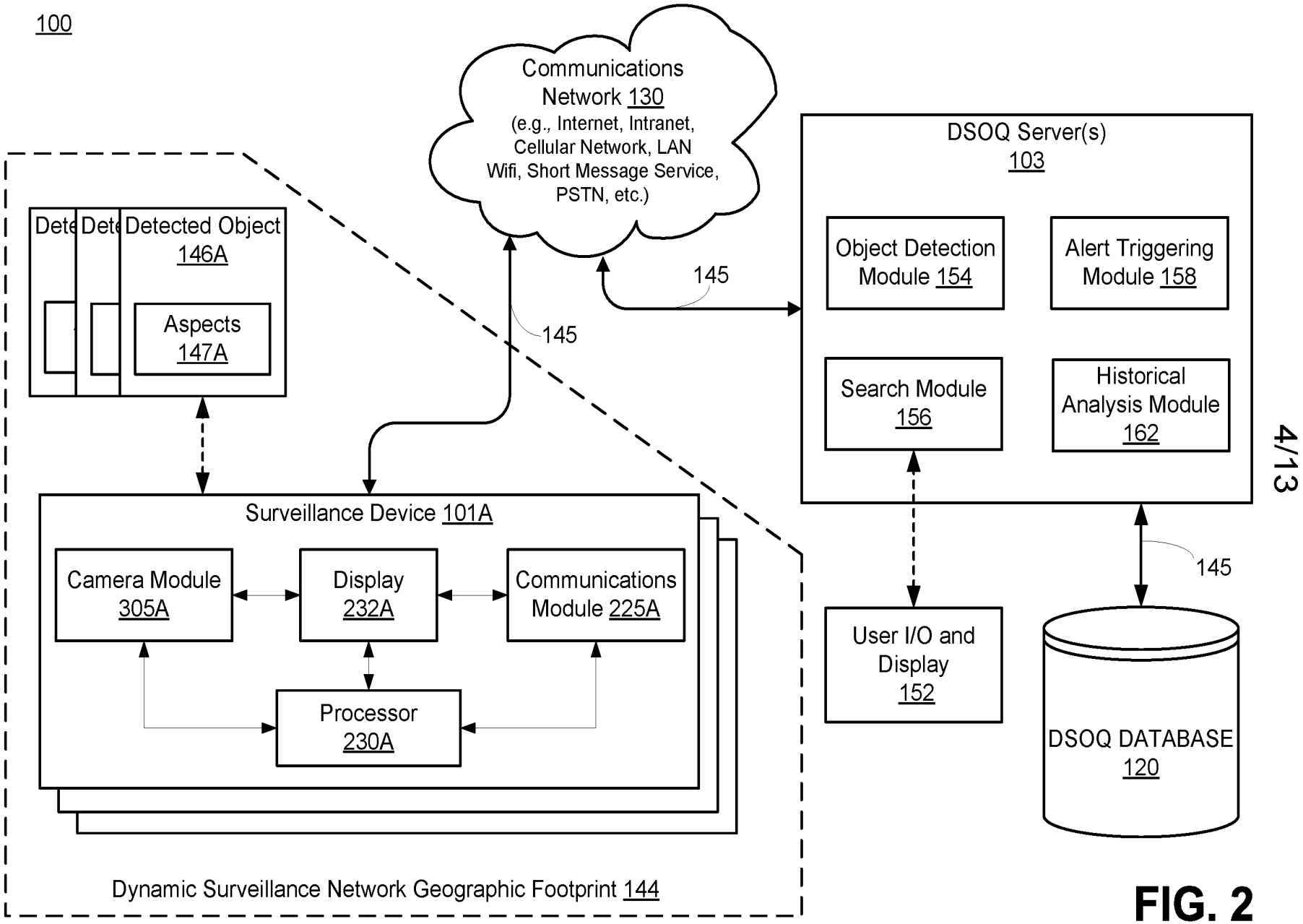

100
Communications Network 130
(e.g., Internet, Intranet, Cellular Network, LAN Wifi, Short Message Service, PSTN, etc.)
DSOQ Server(s) 103
Object Detection Module 154
Alert Triggering Module 158
Search Module 156
Historical Analysis Module 162
User I/O and Display 152
DSOQ DATABASE 120
Detected Object 146A
Aspects 147A
145
145
145
Surveillance Device 101A
Camera Module 305A
Display 232A
Communications Module 225A
Processor 230A
Dynamic Surveillance Network Geographic Footprint 144

FIG. 2

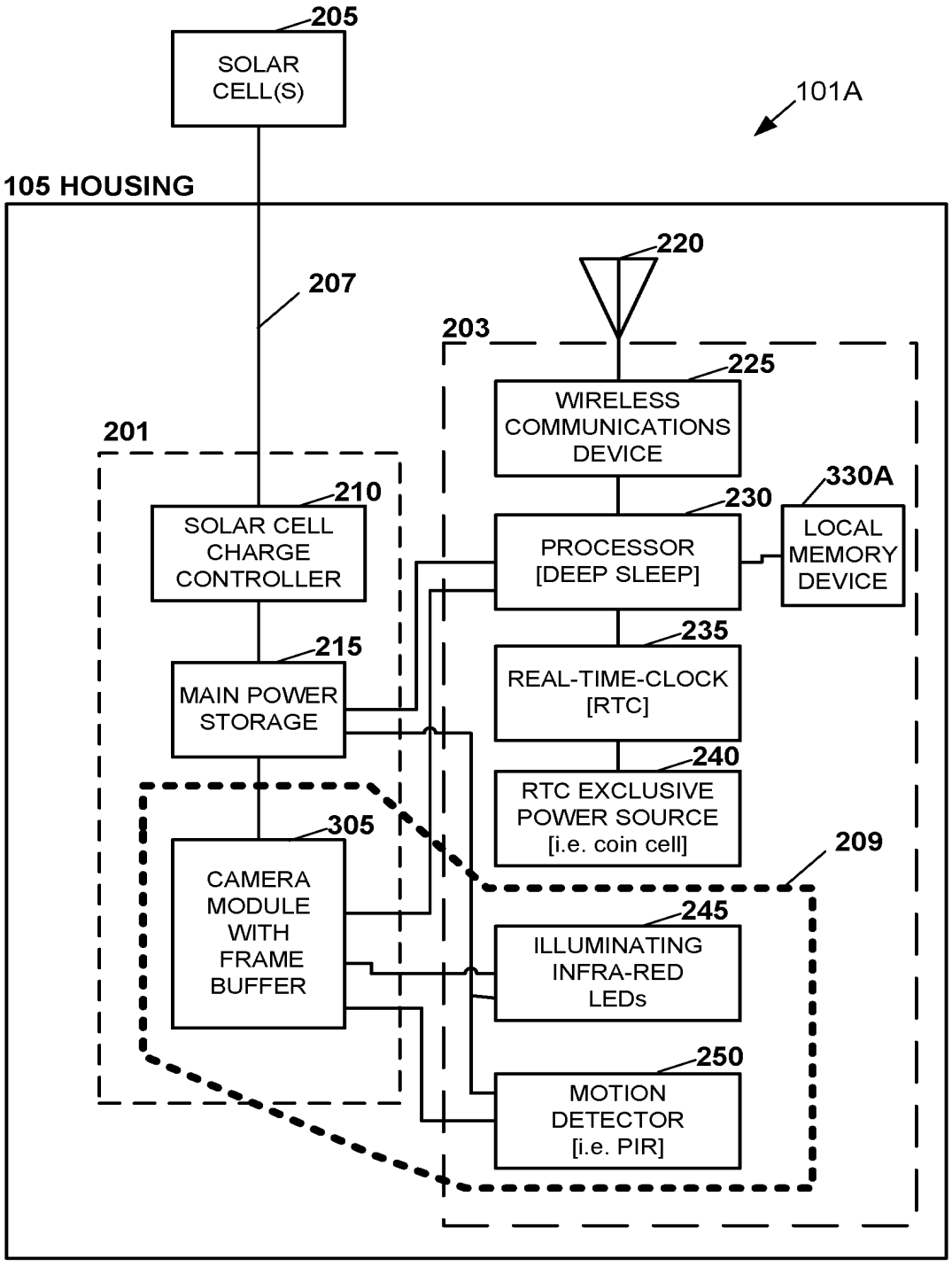

205
SOLAR CELL(S)
101A
105 HOUSING
220
207
203
225
WIRELESS COMMUNICATIONS DEVICE
201
210
SOLAR CELL CHARGE CONTROLLER
230
330A
PROCESSOR [DEEP SLEEP]
LOCAL MEMORY DEVICE
235
215
MAIN POWER STORAGE
REAL-TIME-CLOCK [RTC]
240
RTC EXCLUSIVE POWER SOURCE [i.e. coin cell]
305
209
CAMERA MODULE WITH FRAME BUFFER
245
ILLUMINATING INFRA-RED LEDs
250
MOTION DETECTOR [i.e. PIR]

FIG. 3A

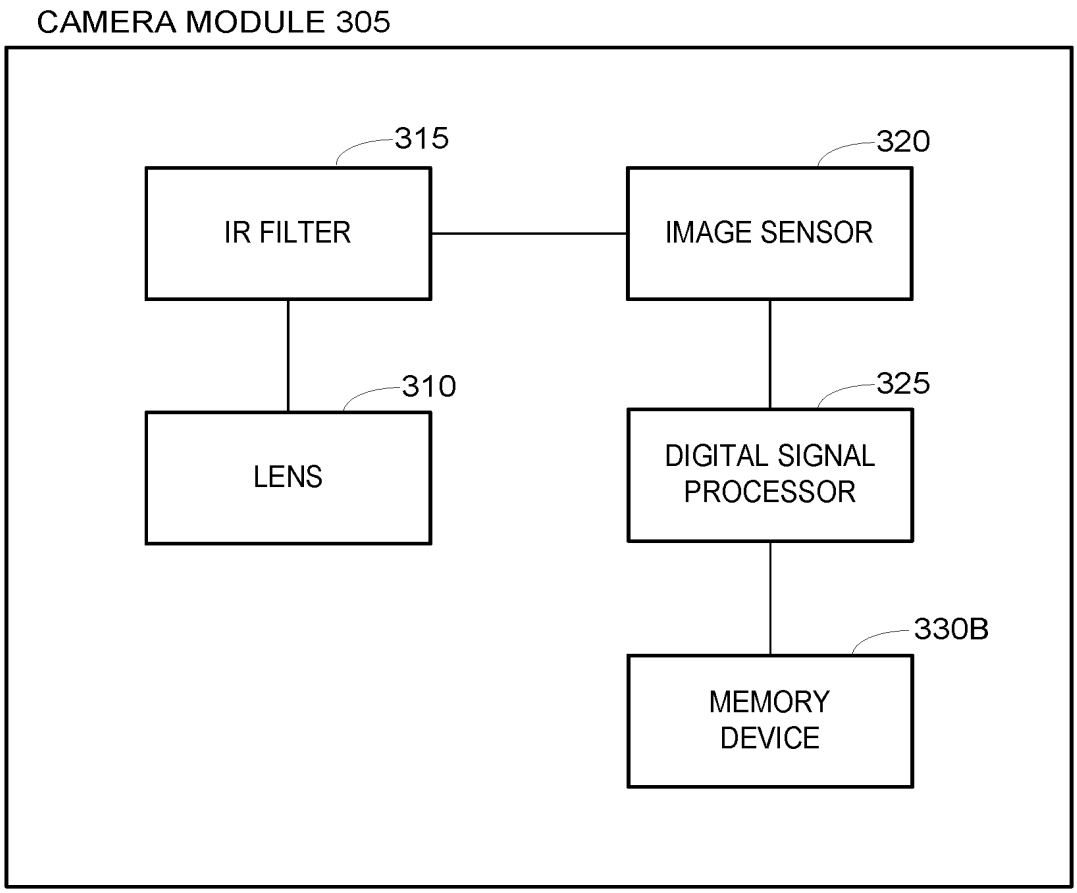

CAMERA MODULE 305
315
IR FILTER
320
IMAGE SENSOR
310
LENS
325
DIGITAL SIGNAL PROCESSOR
330B
MEMORY DEVICE

FIG. 3B

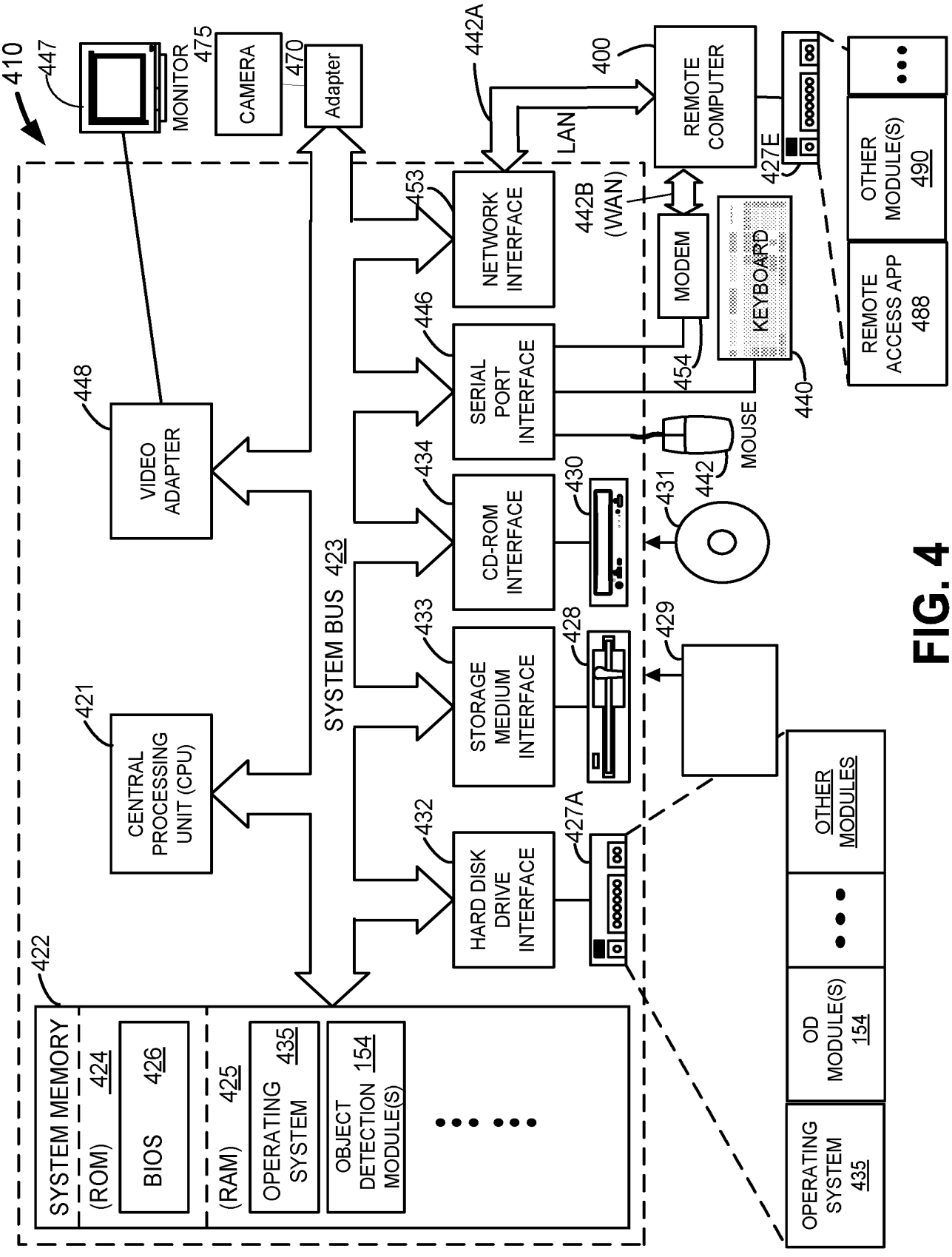

410
447
MONITOR
475
CAMERA
470
Adapter
442A
400
REMOTE COMPUTER
LAN
442B (WAN)
427E
OTHER MODULE(S) 490
REMOTE ACCESS APP 488
453
NETWORK INTERFACE
MODEM
KEYBOARD
446
SERIAL PORT INTERFACE
454
440
448
VIDEO ADAPTER
MOUSE
442
434
CD-ROM INTERFACE
430
431
SYSTEM BUS 423
433
STORAGE MEDIUM INTERFACE
428
429
421
CENTRAL PROCESSING UNIT (CPU)
432
HARD DISK DRIVE INTERFACE
427A
OTHER MODULES
OD MODULE(S) 154
OPERATING SYSTEM 435
422
SYSTEM MEMORY
(ROM) 424
BIOS 426
(RAM) 425
OPERATING SYSTEM 435
OBJECT DETECTION 154 MODULE(S)

FIG. 4

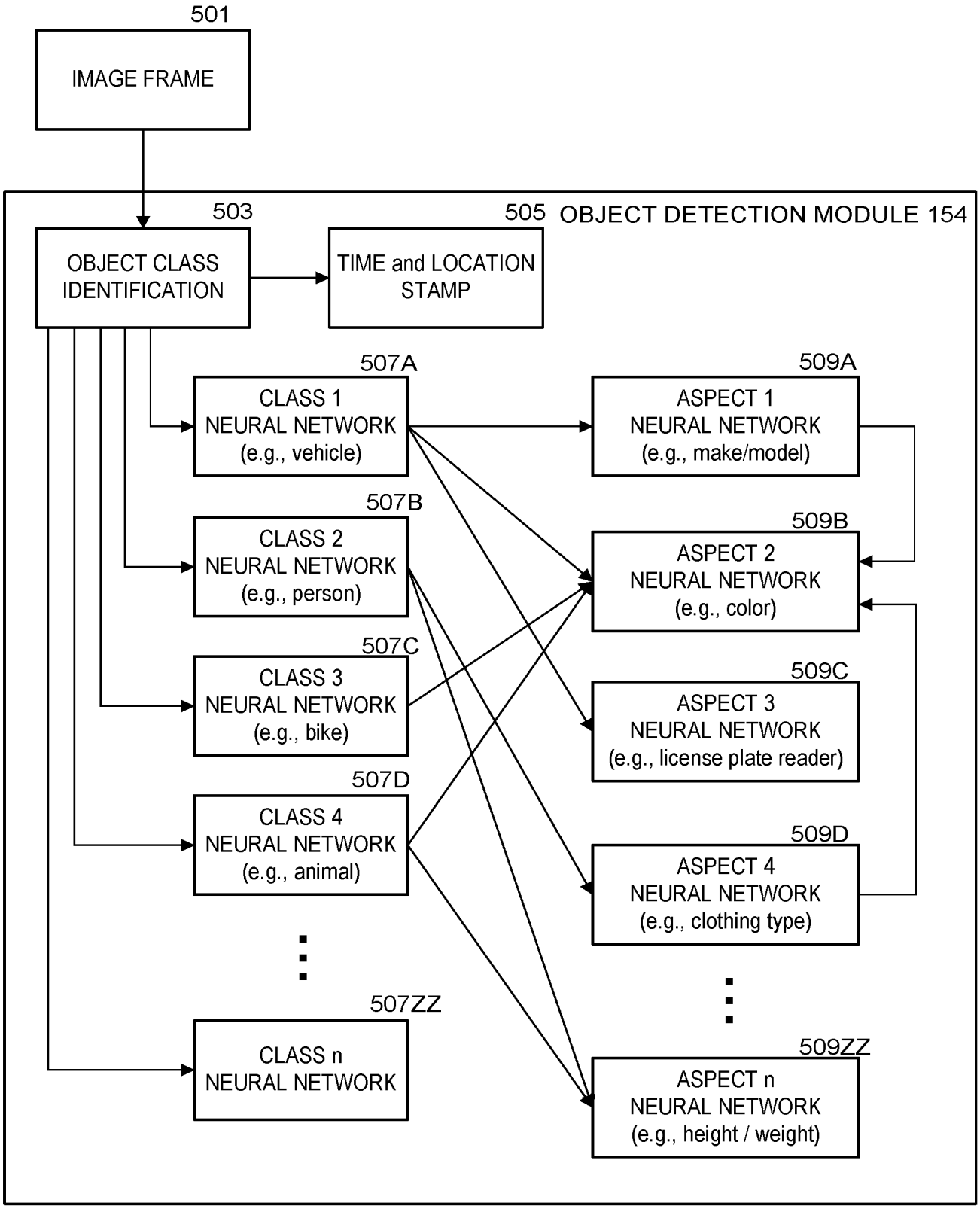

501
IMAGE FRAME
503
OBJECT CLASS IDENTIFICATION
505
TIME and LOCATION STAMP
OBJECT DETECTION MODULE 154
507A
CLASS 1 NEURAL NETWORK (e.g., vehicle)
507B
CLASS 2 NEURAL NETWORK (e.g., person)
507C
CLASS 3 NEURAL NETWORK (e.g., bike)
507D
CLASS 4 NEURAL NETWORK (e.g., animal)
507ZZ
CLASS n NEURAL NETWORK
509A
ASPECT 1 NEURAL NETWORK (e.g., make/model)
509B
ASPECT 2 NEURAL NETWORK (e.g., color)
509C
ASPECT 3 NEURAL NETWORK (e.g., license plate reader)
509D
ASPECT 4 NEURAL NETWORK (e.g., clothing type)
509ZZ
ASPECT n NEURAL NETWORK (e.g., height / weight)

FIG. 5A

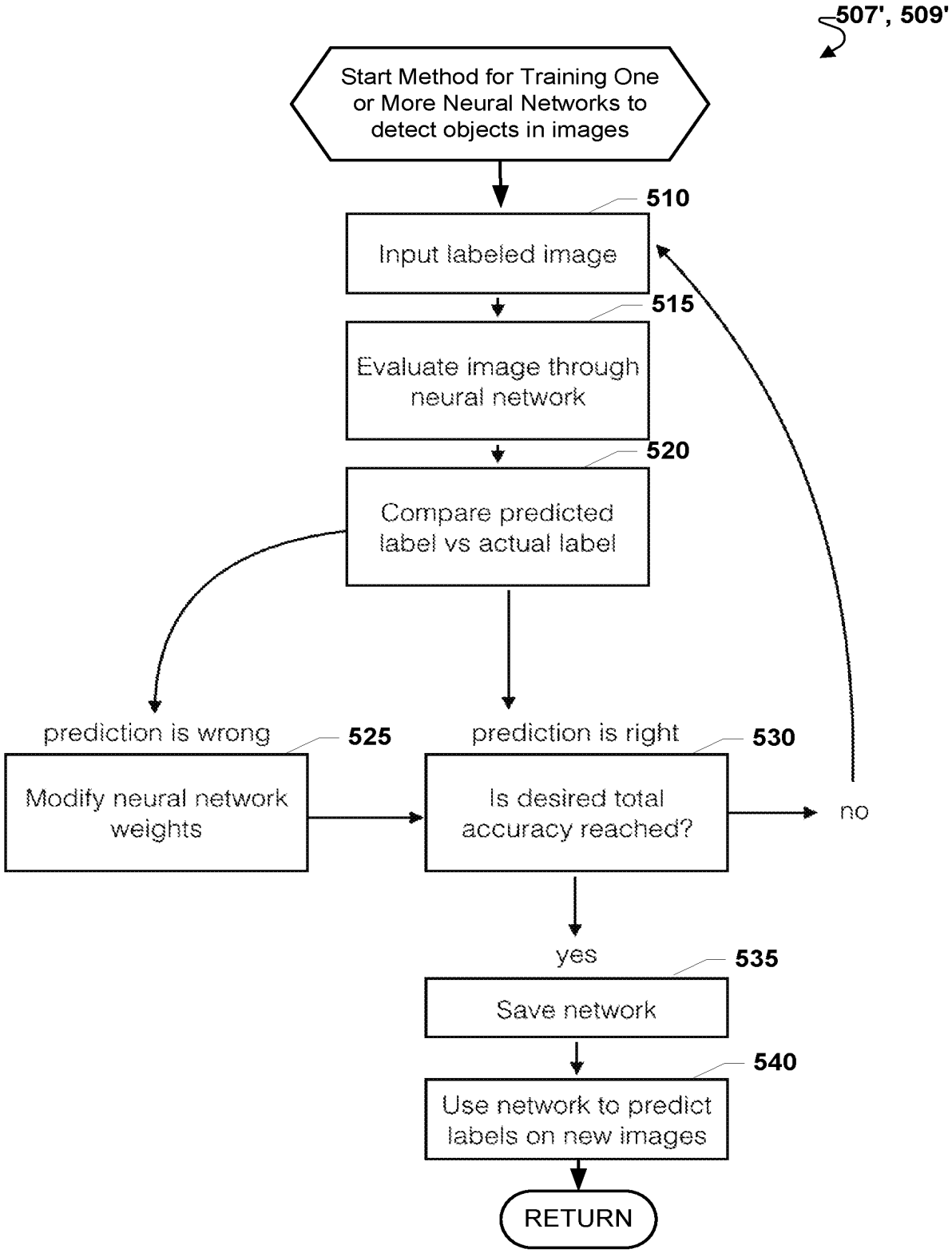

507', 509'
Start Method for Training One or More Neural Networks to detect objects in images
510
Input labeled image
515
Evaluate image through neural network
520
Compare predicted label vs actual label
prediction is wrong
525
Modify neural network weights
prediction is right
530
Is desired total accuracy reached?
no
yes
535
Save network
540
Use network to predict labels on new images
RETURN

FIG. 5B

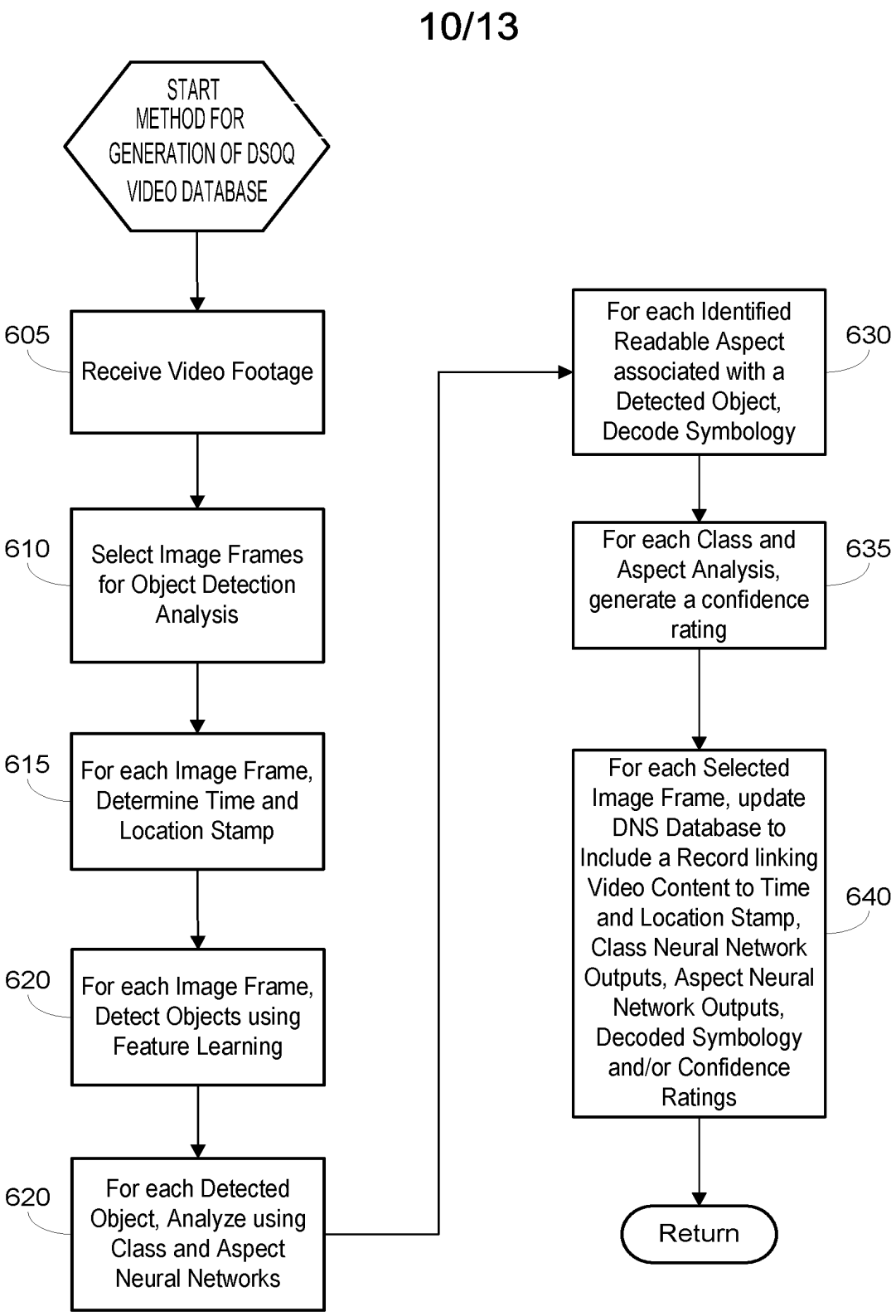

600
START METHOD FOR GENERATION OF DSOQ VIDEO DATABASE
605
Receive Video Footage
610
Select Image Frames for Object Detection Analysis
615
For each Image Frame, Determine Time and Location Stamp
620
For each Image Frame, Detect Objects using Feature Learning
620
For each Detected Object, Analyze using Class and Aspect Neural Networks
630
For each Identified Readable Aspect associated with a Detected Object, Decode Symbology
635
For each Class and Aspect Analysis, generate a confidence rating
640
For each Selected Image Frame, update DNS Database to Include a Record linking Video Content to Time and Location Stamp, Class Neural Network Outputs, Aspect Neural Network Outputs, Decoded Symbology and/or Confidence Ratings
Return

FIG. 6

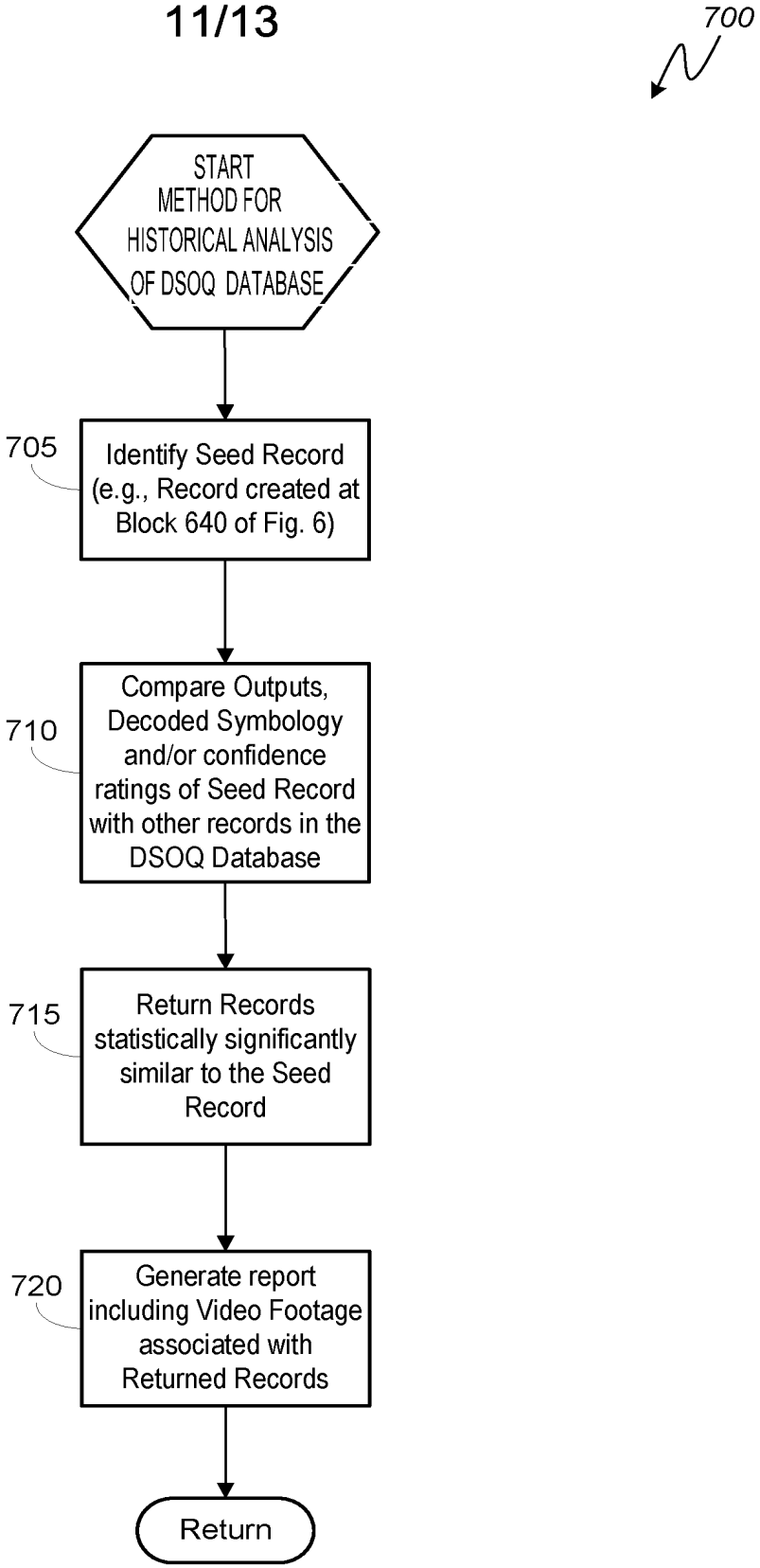

700
START METHOD FOR HISTORICAL ANALYSIS OF DSOQ DATABASE
705
Identify Seed Record (e.g., Record created at Block 640 of Fig. 6)
710
Compare Outputs, Decoded Symbology and/or confidence ratings of Seed Record with other records in the DSOQ Database
715
Return Records statistically significantly similar to the Seed Record
720
Generate report including Video Footage associated with Returned Records
Return

FIG. 7

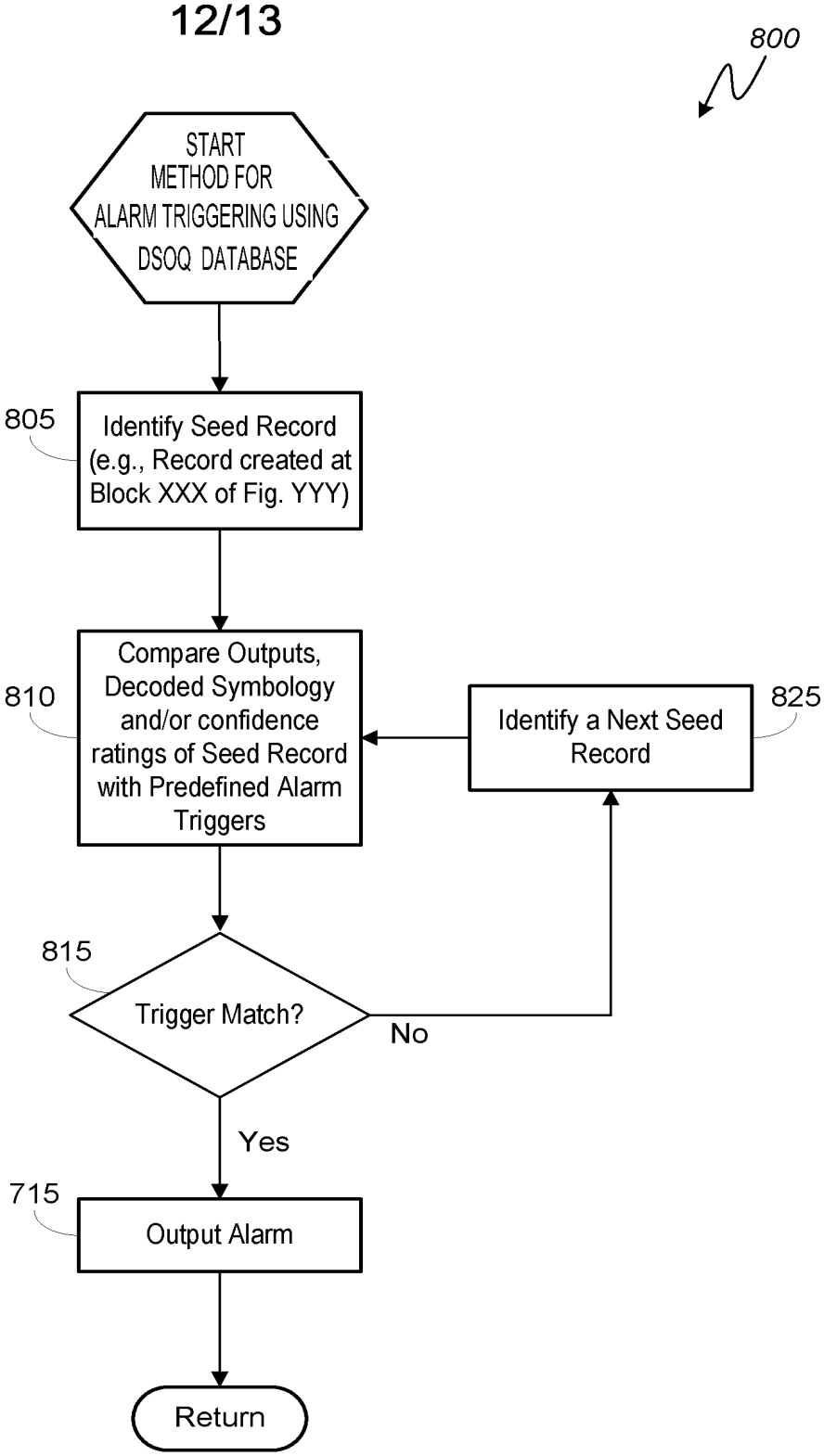

800
START METHOD FOR ALARM TRIGGERING USING DSOQ DATABASE
805
Identify Seed Record (e.g., Record created at Block XXX of Fig. YYY)
810
Compare Outputs, Decoded Symbology and/or confidence ratings of Seed Record with Predefined Alarm Triggers
825
Identify a Next Seed Record
815
Trigger Match?
No
Yes
715
Output Alarm
Return

FIG. 8

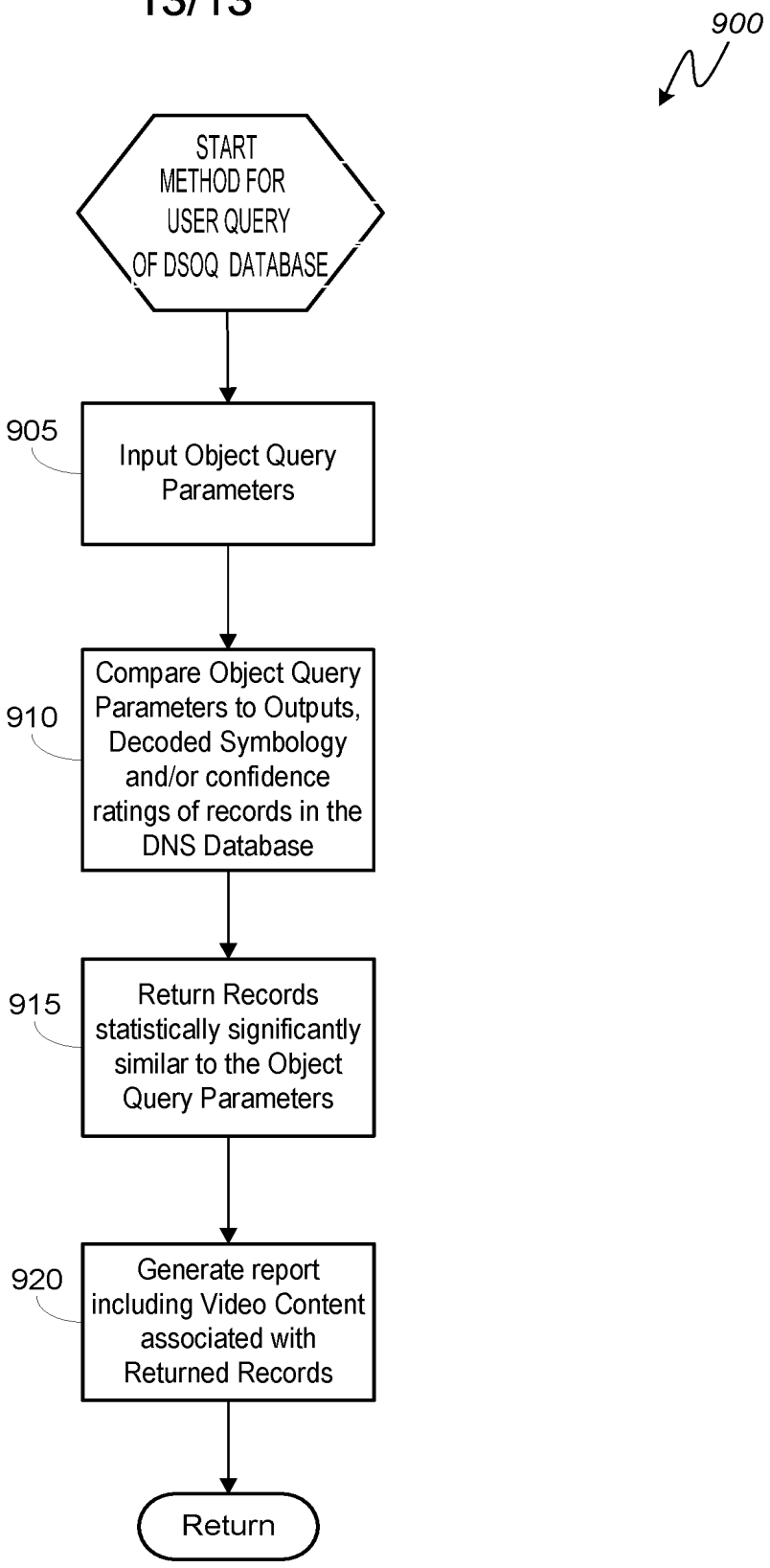

900
START METHOD FOR USER QUERY OF DSOQ DATABASE
905
Input Object Query Parameters
910
Compare Object Query Parameters to Outputs, Decoded Symbology and/or confidence ratings of records in the DNS Database
915
Return Records statistically significantly similar to the Object Query Parameters
920
Generate report including Video Content associated with Returned Records
Return

FIG. 9