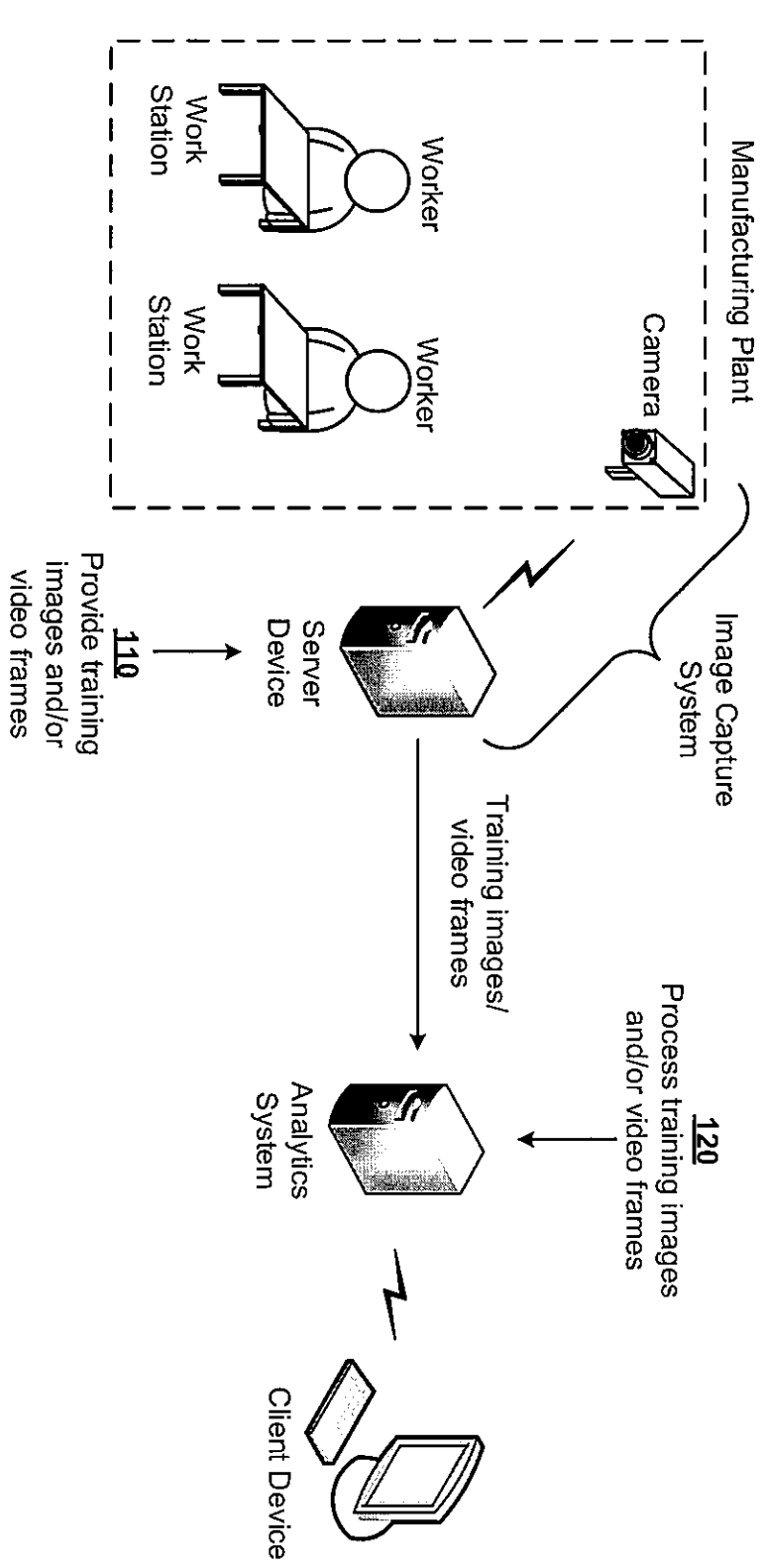
100
Manufacturing Plant
Camera
Work Station
Worker
Work Station
Worker
Image Capture System
Server Device
110
Provide training images and/or video frames
Training images/ video frames
Analytics System
120
Process training images and/or video frames
Client Device

FIG. 1A

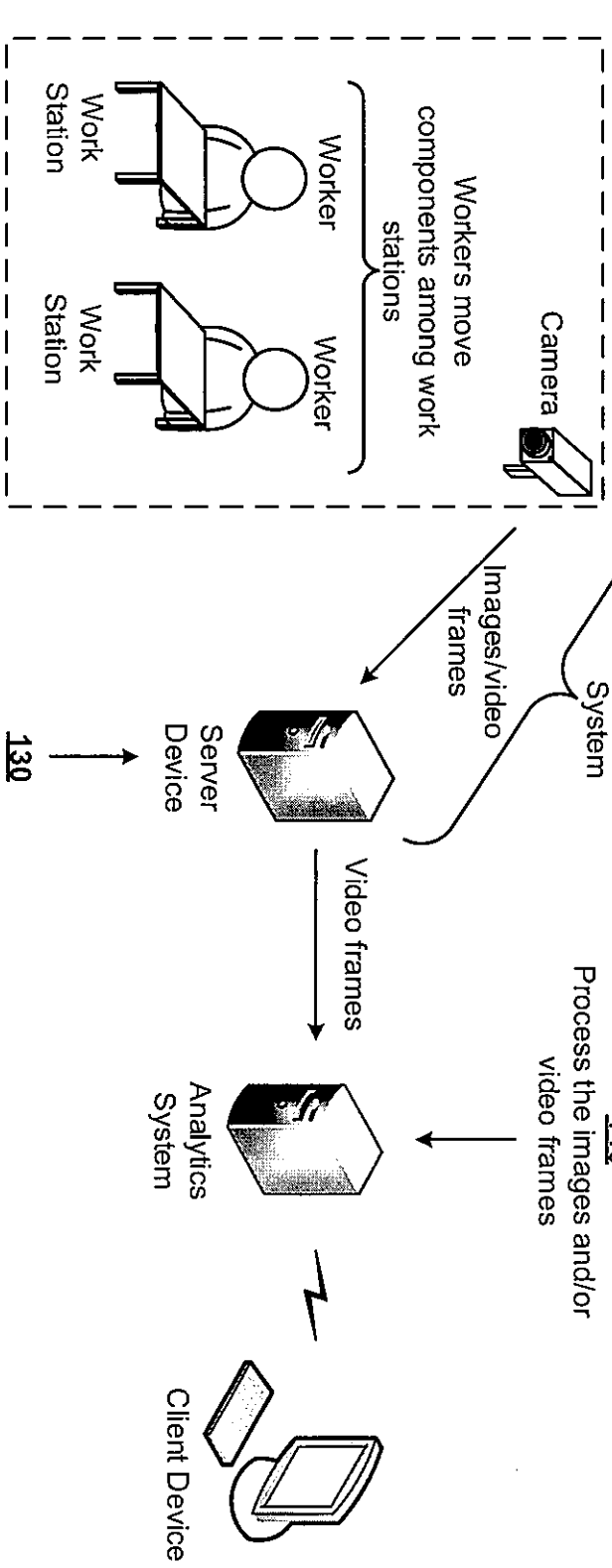
100
Manufacturing Plant
Camera
Workers move components among work stations
Worker
Work Station
Worker
Work Station
Image Capture System
Images/video frames
Server Device
130
Receive images and/or video frames
Video frames
Analytics System
140
Process the images and/or video frames
Client Device

FIG. 1B

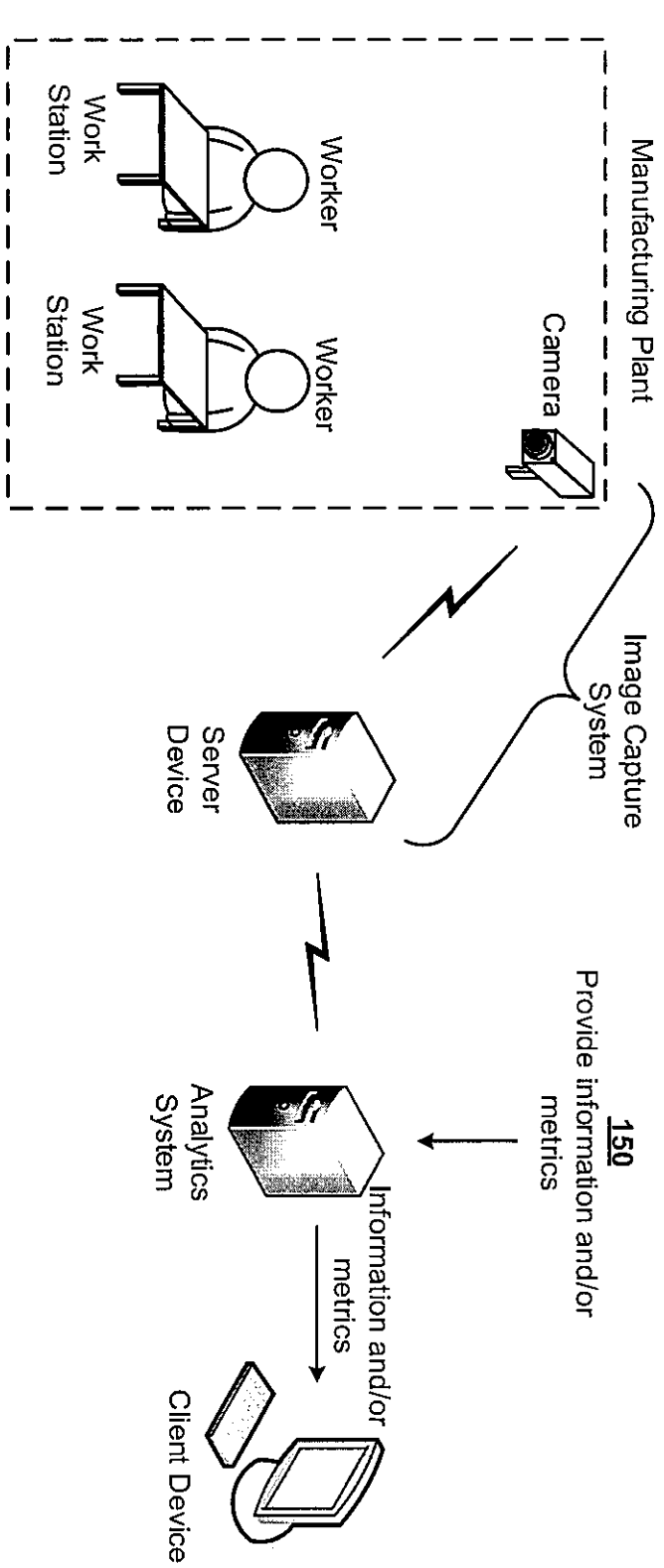
100
Manufacturing Plant
Camera
Work Station
Worker
Work Station
Worker
Image Capture System
Server Device
Analytics System
150
Provide information and/or metrics
Information and/or metrics
Client Device

FIG. 1C

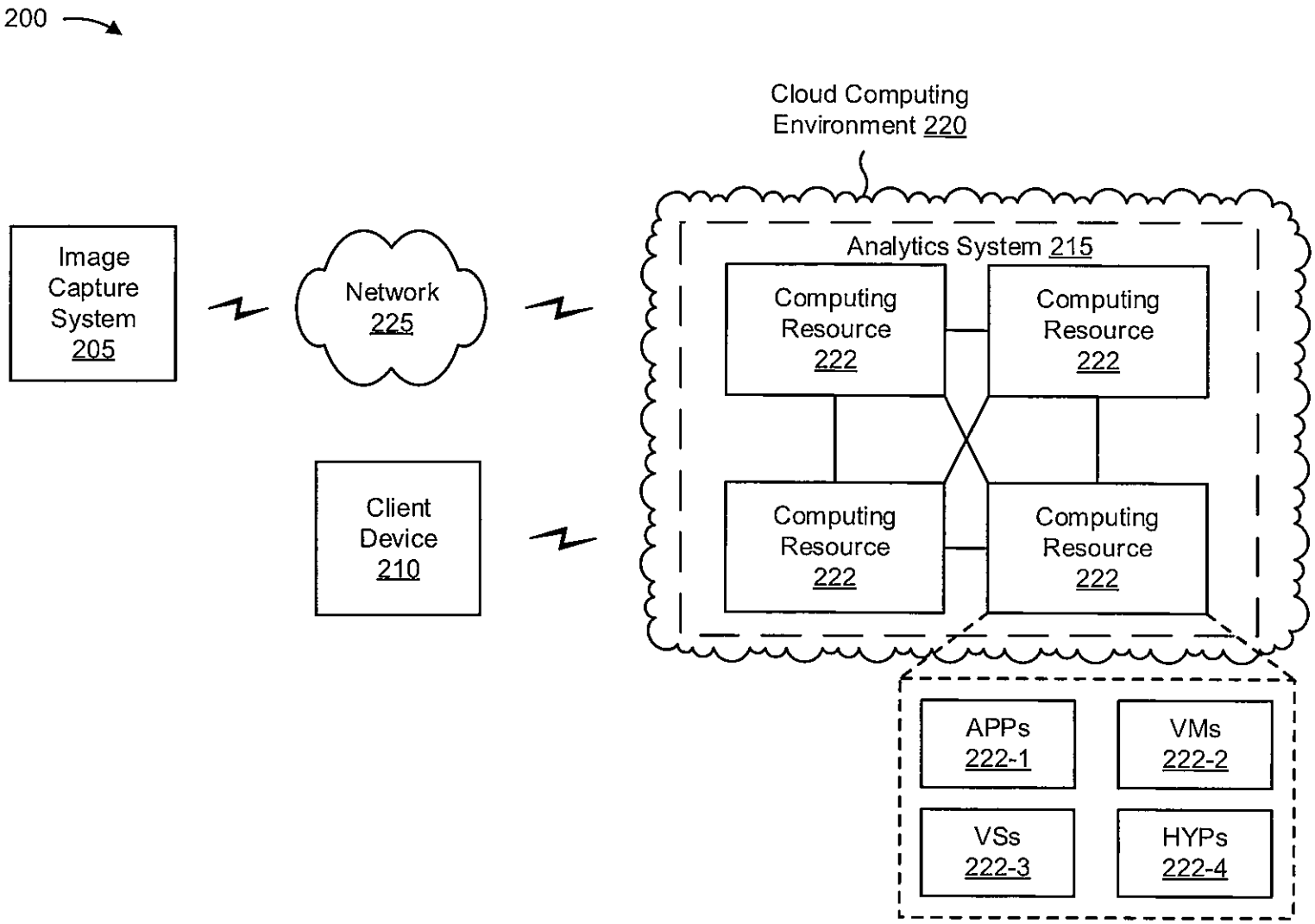
200
Cloud Computing Environment 220
Image Capture System 205
Network 225
Client Device 210
Analytics System 215
Computing Resource 222
Computing Resource 222
Computing Resource 222
Computing Resource 222
APPs 222-1
VMs 222-2
VSs 222-3
HYPs 222-4

FIG. 2

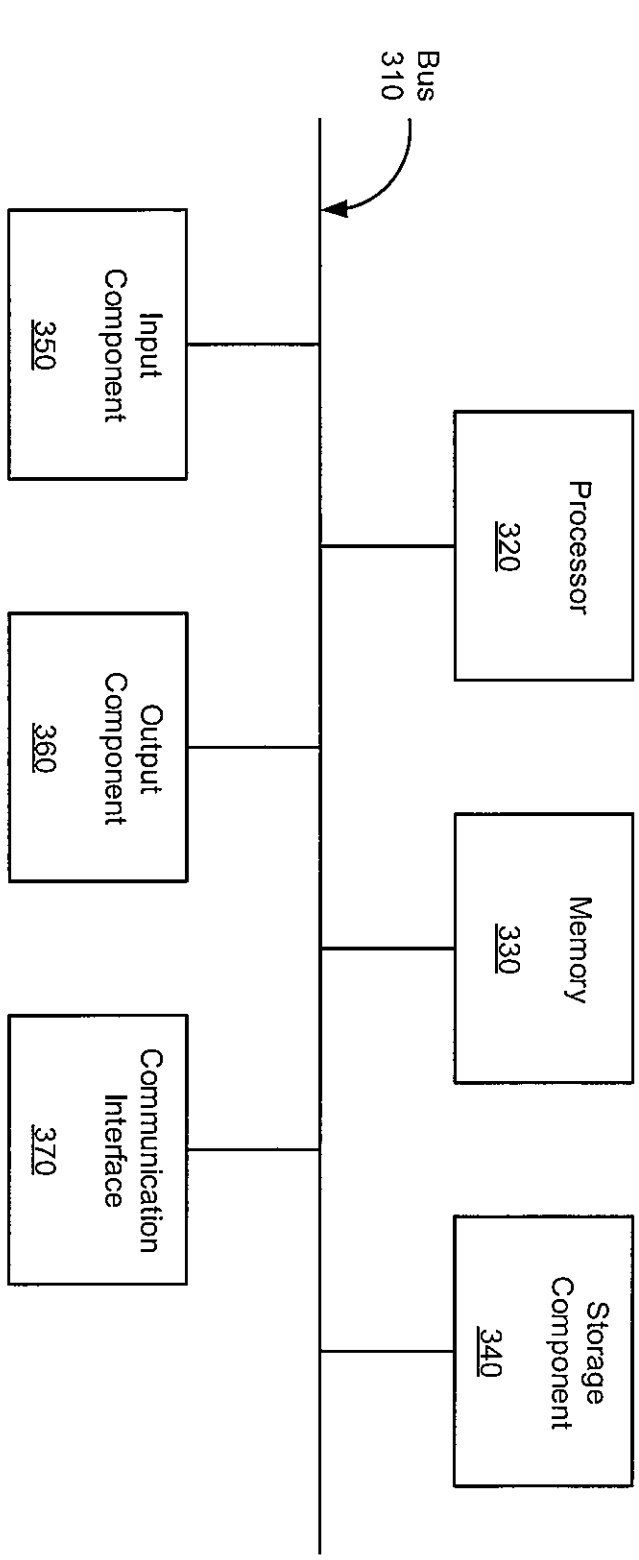
300
Bus
310
Input
Component
350
Processor
320
Output
Component
360
Memory
330
Communication
Interface
370
Storage
Component
340

FIG. 3

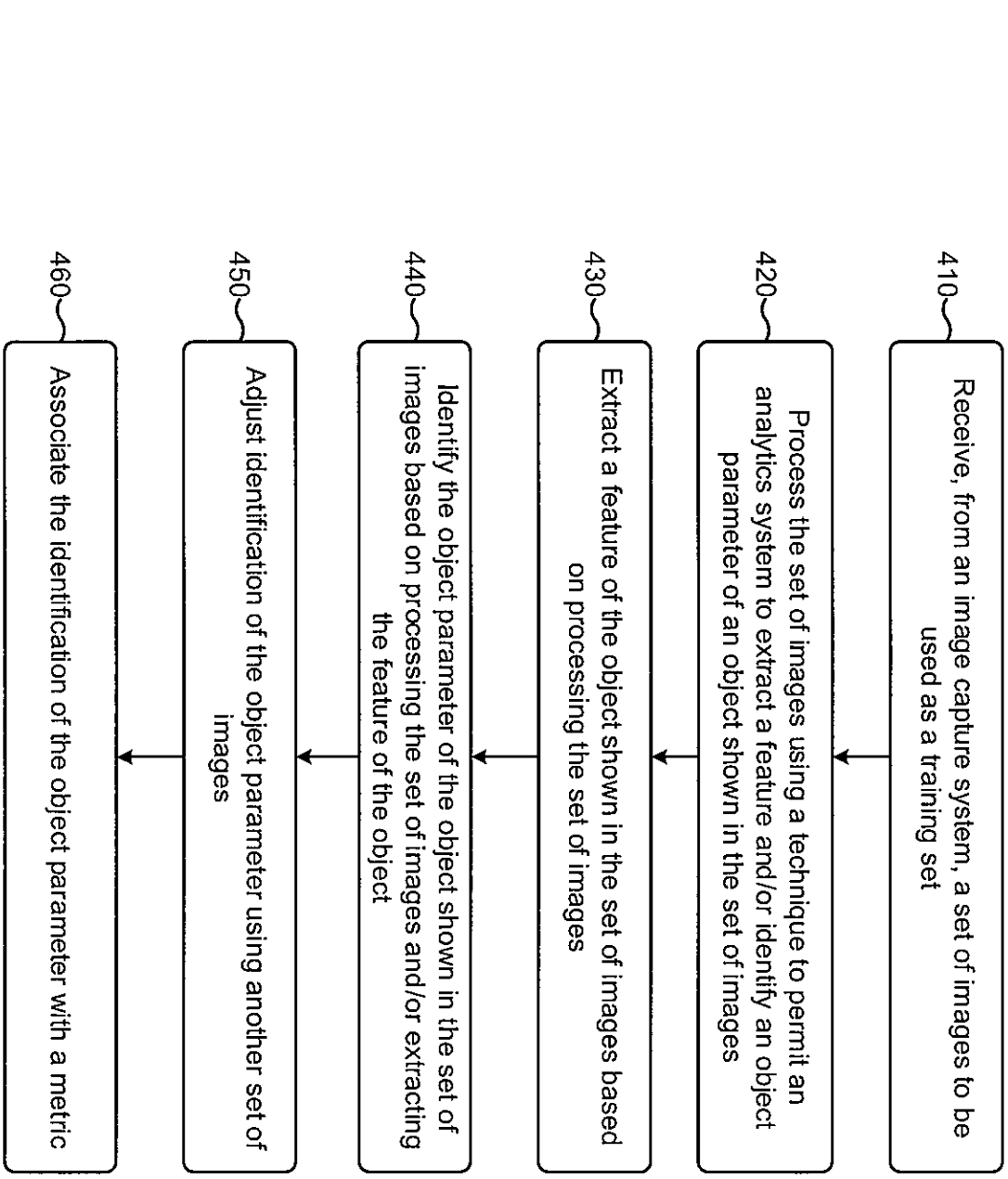
400
410
Receive, from an image capture system, a set of images to be used as a training set
420
Process the set of images using a technique to permit an analytics system to extract a feature and/or identify an object parameter of an object shown in the set of images
430
Extract a feature of the object shown in the set of images based on processing the set of images
440
Identify the object parameter of the object shown in the set of images based on processing the set of images and/or extracting the feature of the object
450
Adjust identification of the object parameter using another set of images
460
Associate the identification of the object parameter with a metric

FIG. 4

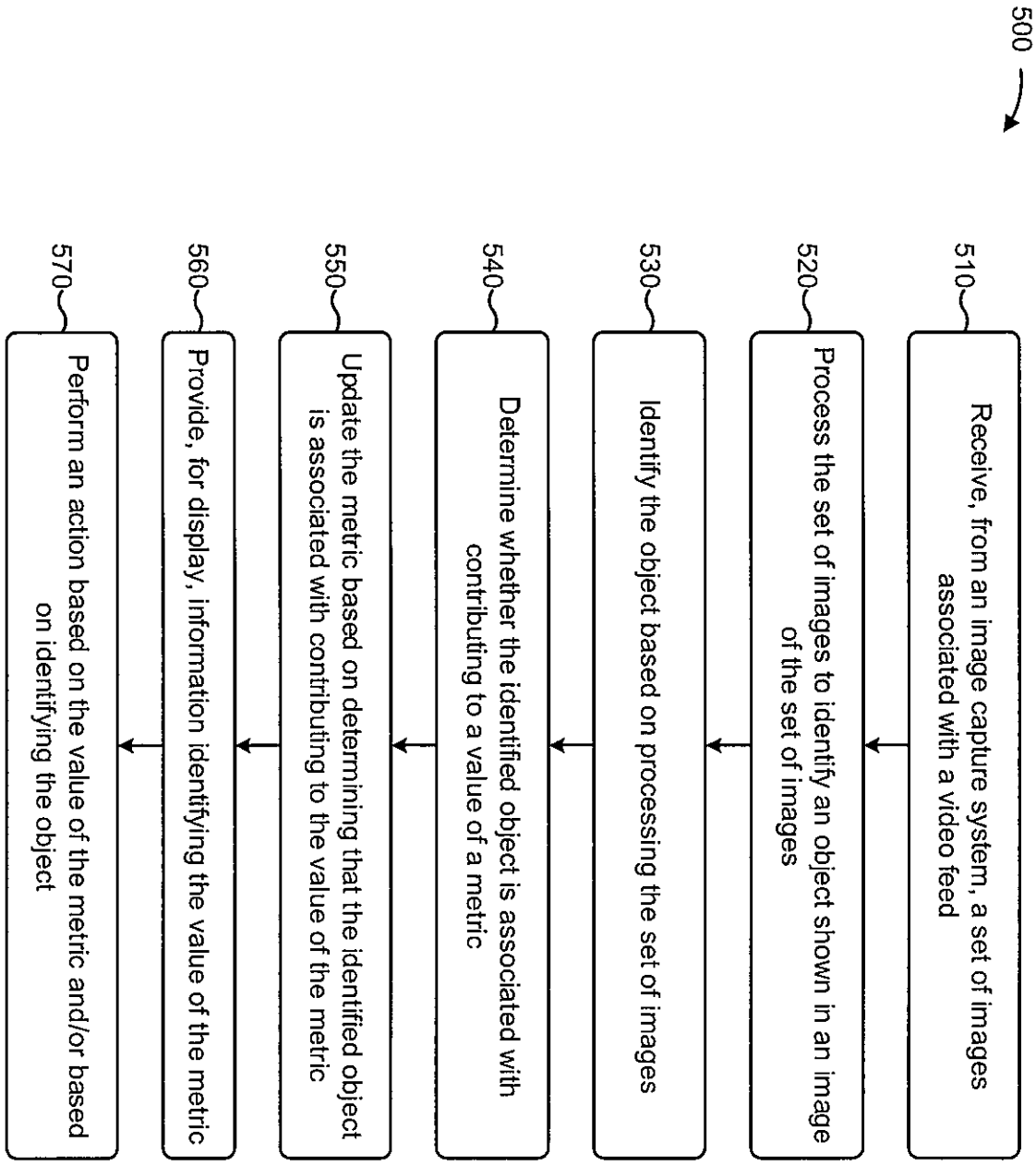
500
510
Receive, from an image capture system, a set of images associated with a video feed
520
Process the set of images to identify an object shown in an image of the set of images
530
Identify the object based on processing the set of images
540
Determine whether the identified object is associated with contributing to a value of a metric
550
Update the metric based on determining that the identified object is associated with contributing to the value of the metric
560
Provide, for display, information identifying the value of the metric
570
Perform an action based on the value of the metric and/or based on identifying the object

FIG. 5

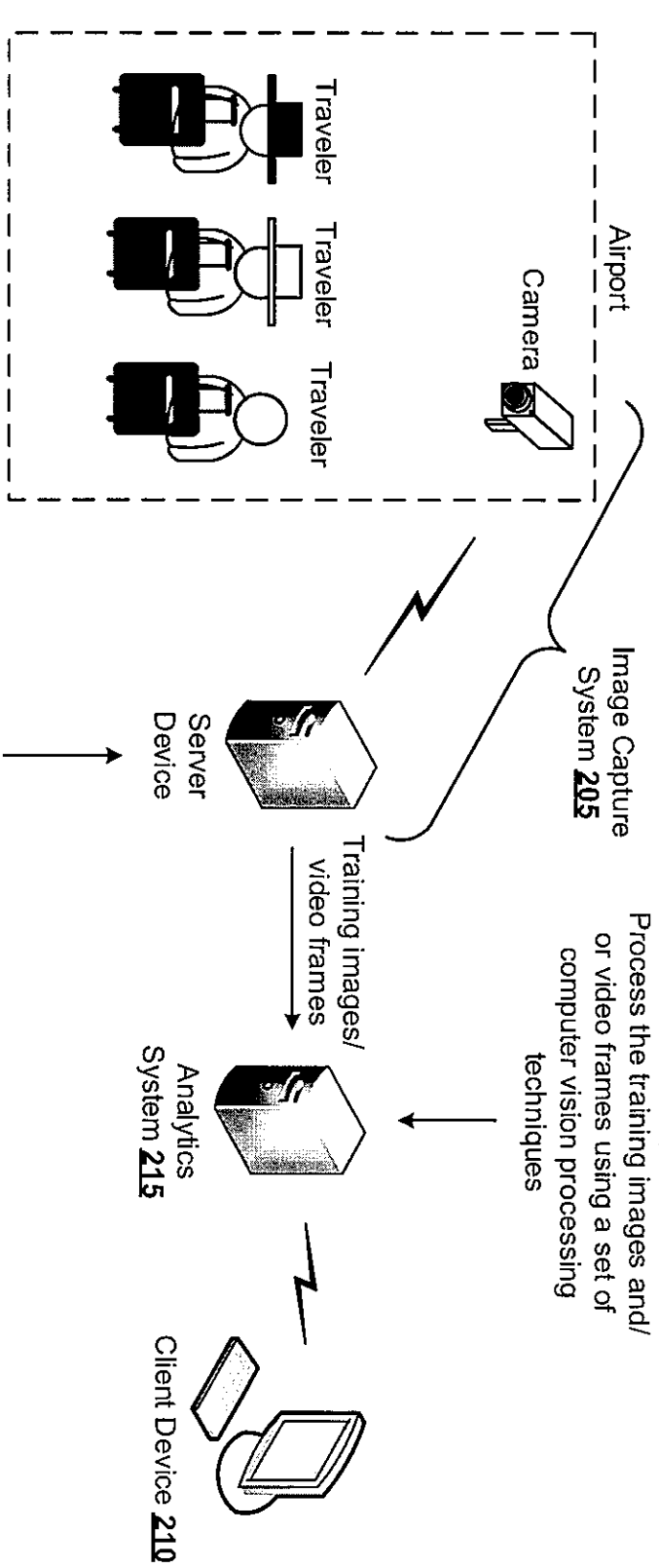
600
Airport
Camera
Traveler
Traveler
Traveler
Image Capture System 205
Server Device
610
Provide training images and/or video frames
Training images/ video frames
Analytics System 215
620
Process the training images and/ or video frames using a set of computer vision processing techniques
Client Device 210

FIG. 6A

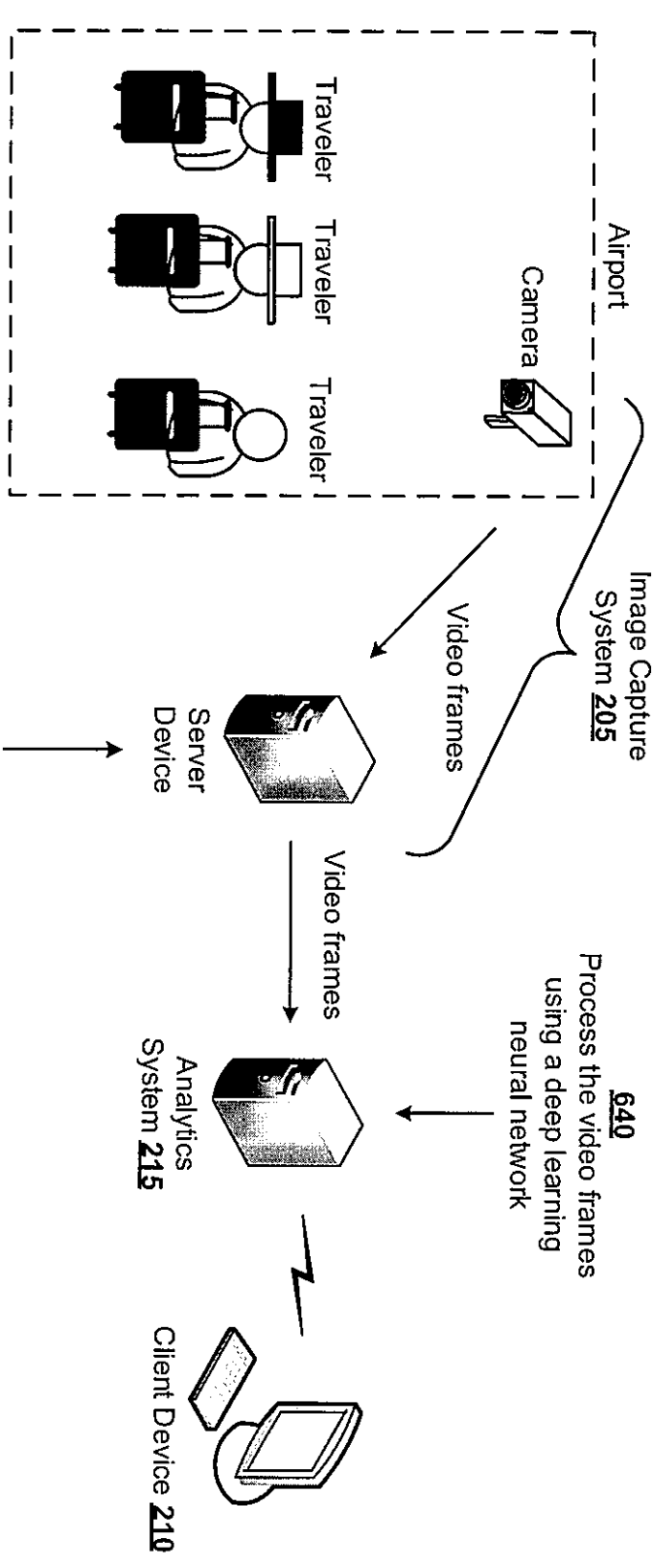
600
Airport
Camera
Traveler
Traveler
Traveler
Image Capture System 205
Video frames
Server Device
630
Receive video frames
Video frames
Analytics System 215
640
Process the video frames using a deep learning neural network
Client Device 210

FIG. 6B

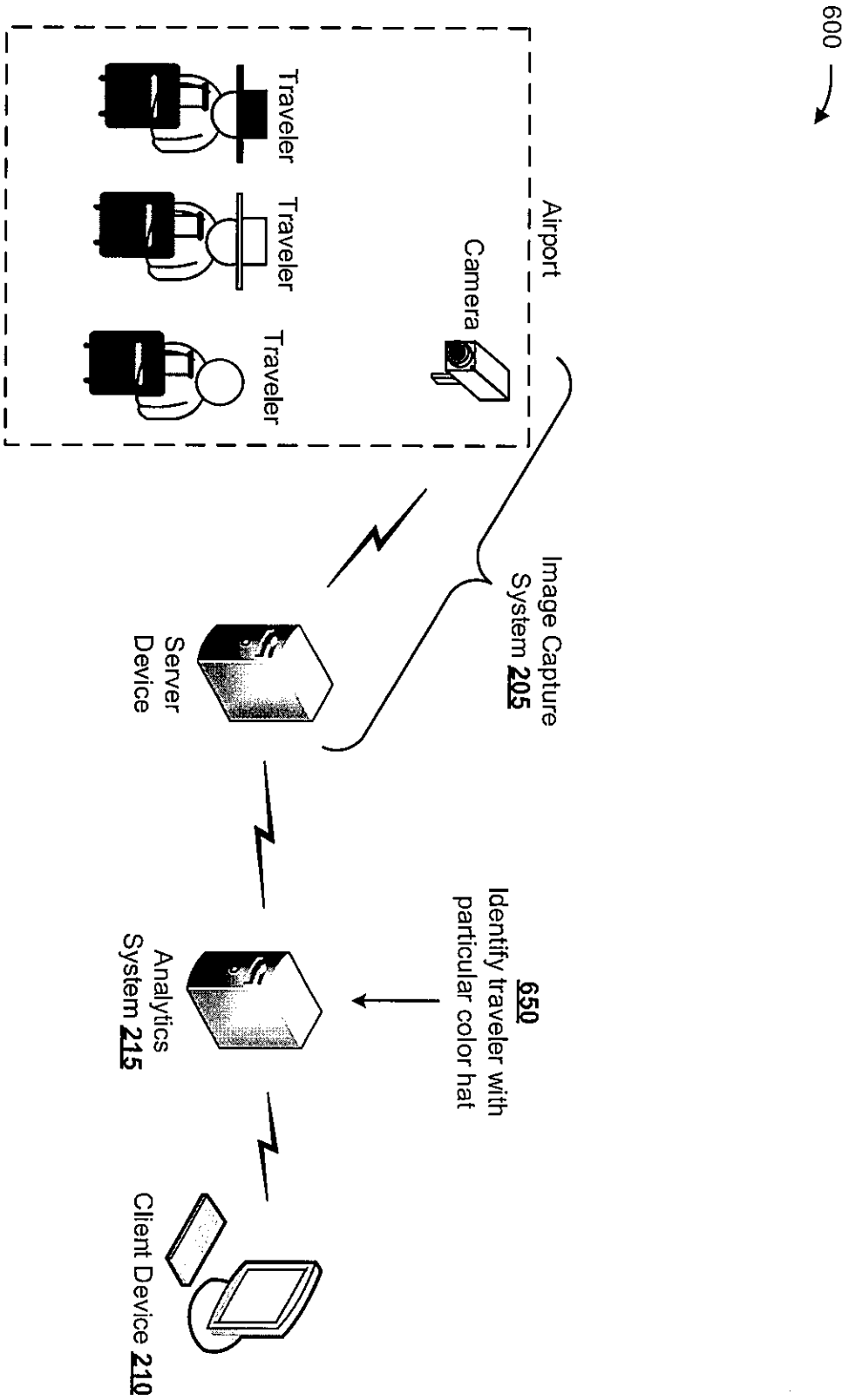
600
Airport
Camera
Traveler
Traveler
Traveler
Image Capture System 205
Server Device
650
Identify traveler with particular color hat
Analytics System 215
Client Device 210

FIG. 6C

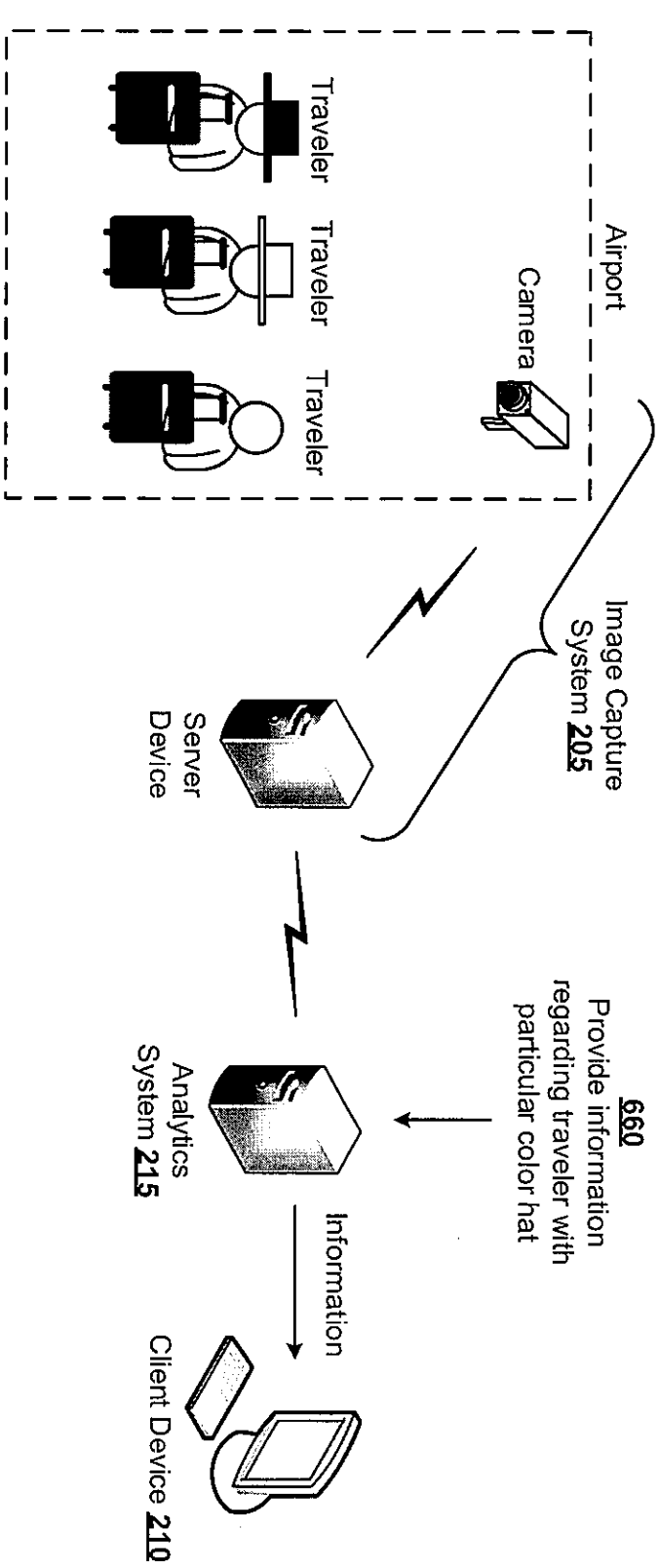
600
Airport
Camera
Traveler
Traveler
Traveler
Image Capture System 205
Server Device
660
Provide information regarding traveler with particular color hat
Analytics System 215
Information
Client Device 210

FIG. 6D

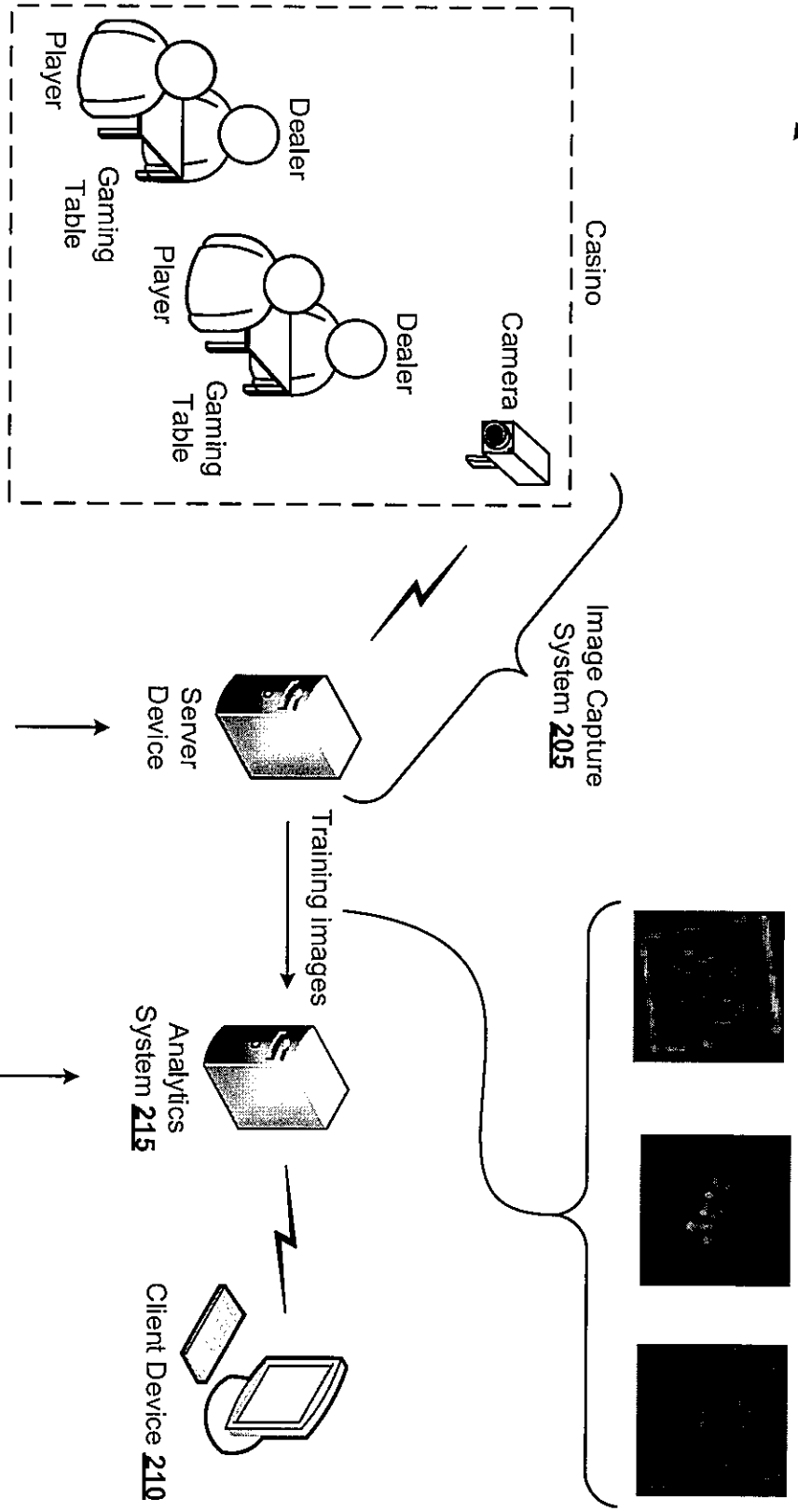
700
Casino
Camera
Dealer
Player
Gaming Table
Dealer
Player
Gaming Table
Image Capture System 205
Server Device
Training images
Analytics System 215
Client Device 210
702
Provide training images
704
Receive and process the training images

FIG. 7A

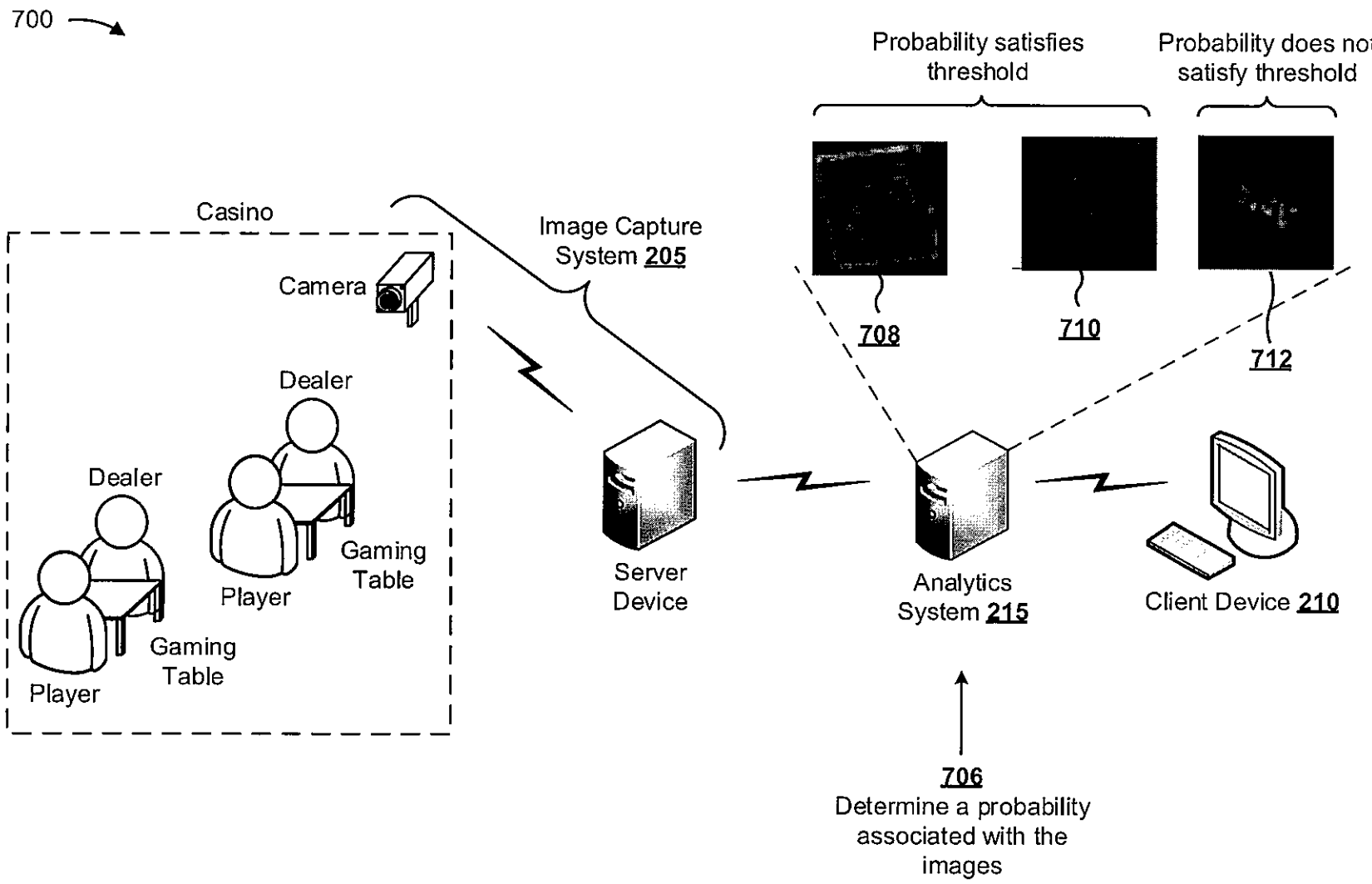
700
Probability satisfies threshold
Probability does not satisfy threshold
Casino
Image Capture System 205
Camera
Dealer
Dealer
Gaming Table
Player
Gaming Table
Player
708
710
712
Server Device
Analytics System 215
Client Device 210
706
Determine a probability associated with the images

FIG. 7B

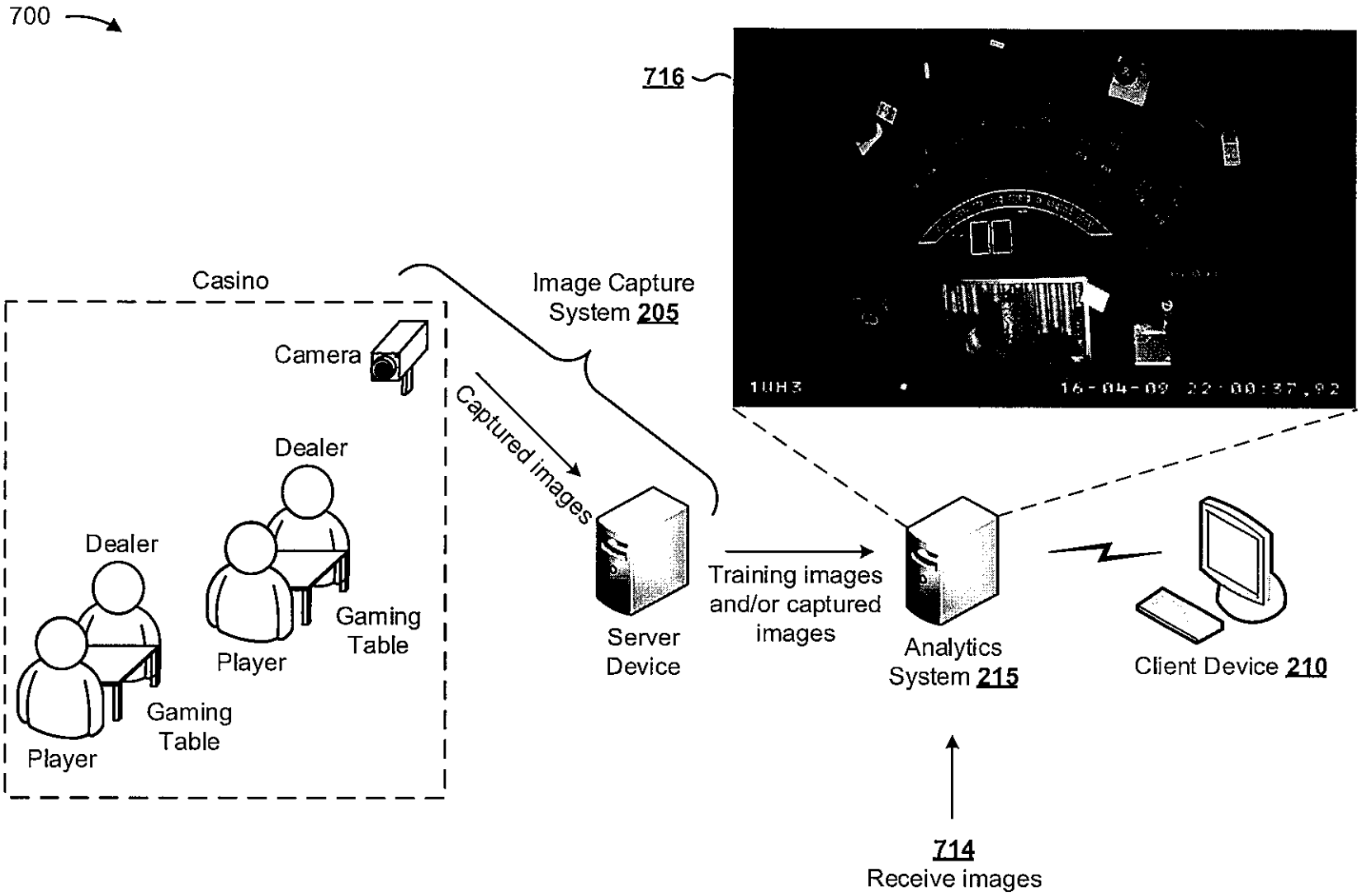
700
716
Casino
Image Capture System 205
Camera
Captured images
Dealer
Dealer
Gaming Table
Player
Gaming Table
Player
Server Device
Training images and/or captured images
Analytics System 215
Client Device 210
714
Receive images

FIG. 7C

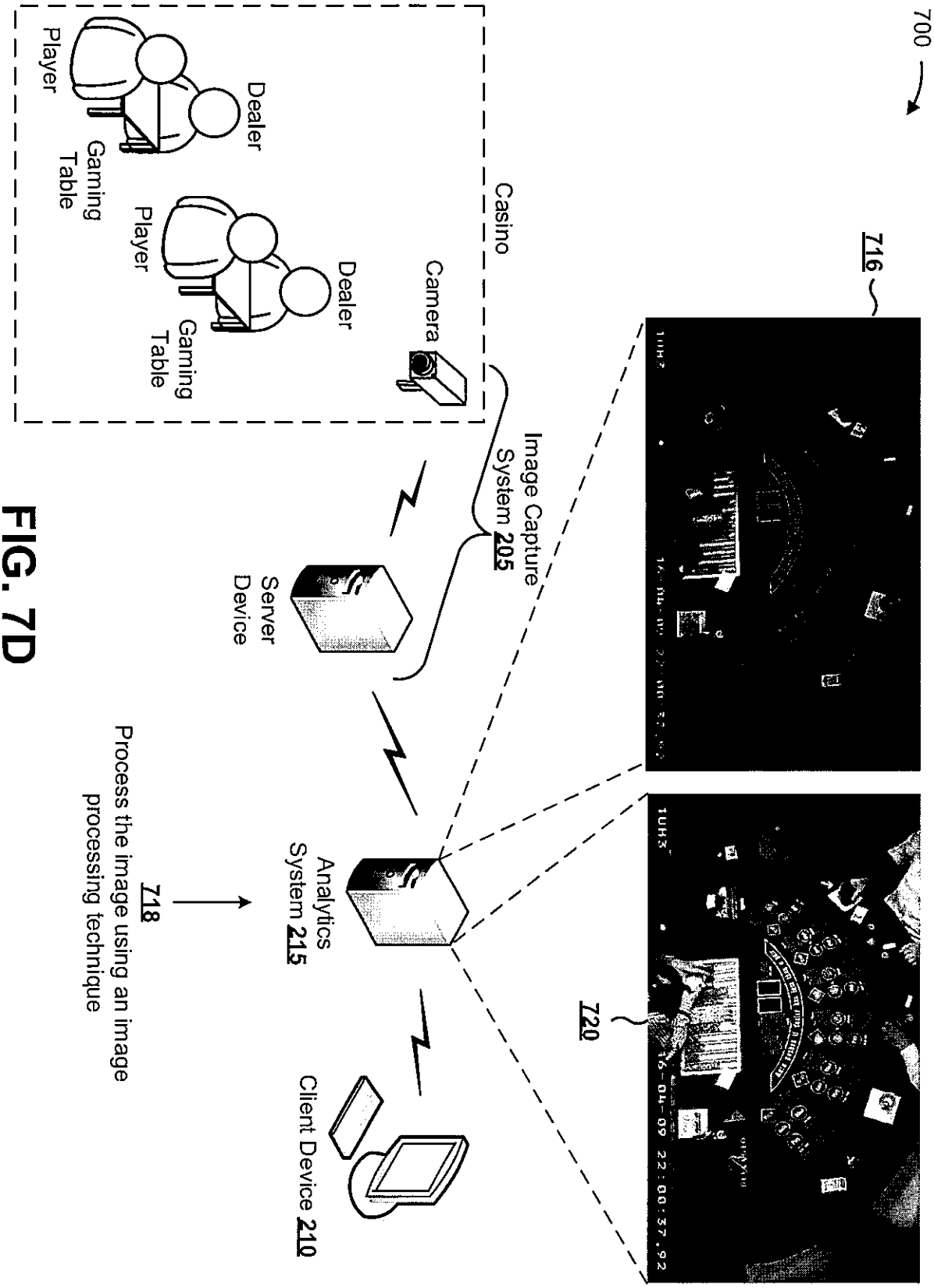
700
716
Casino
Camera
Dealer
Player
Gaming Table
Dealer
Player
Gaming Table
Image Capture System 205
Server Device
Analytics System 215
718
Process the image using an image processing technique
720
Client Device 210

FIG. 7D

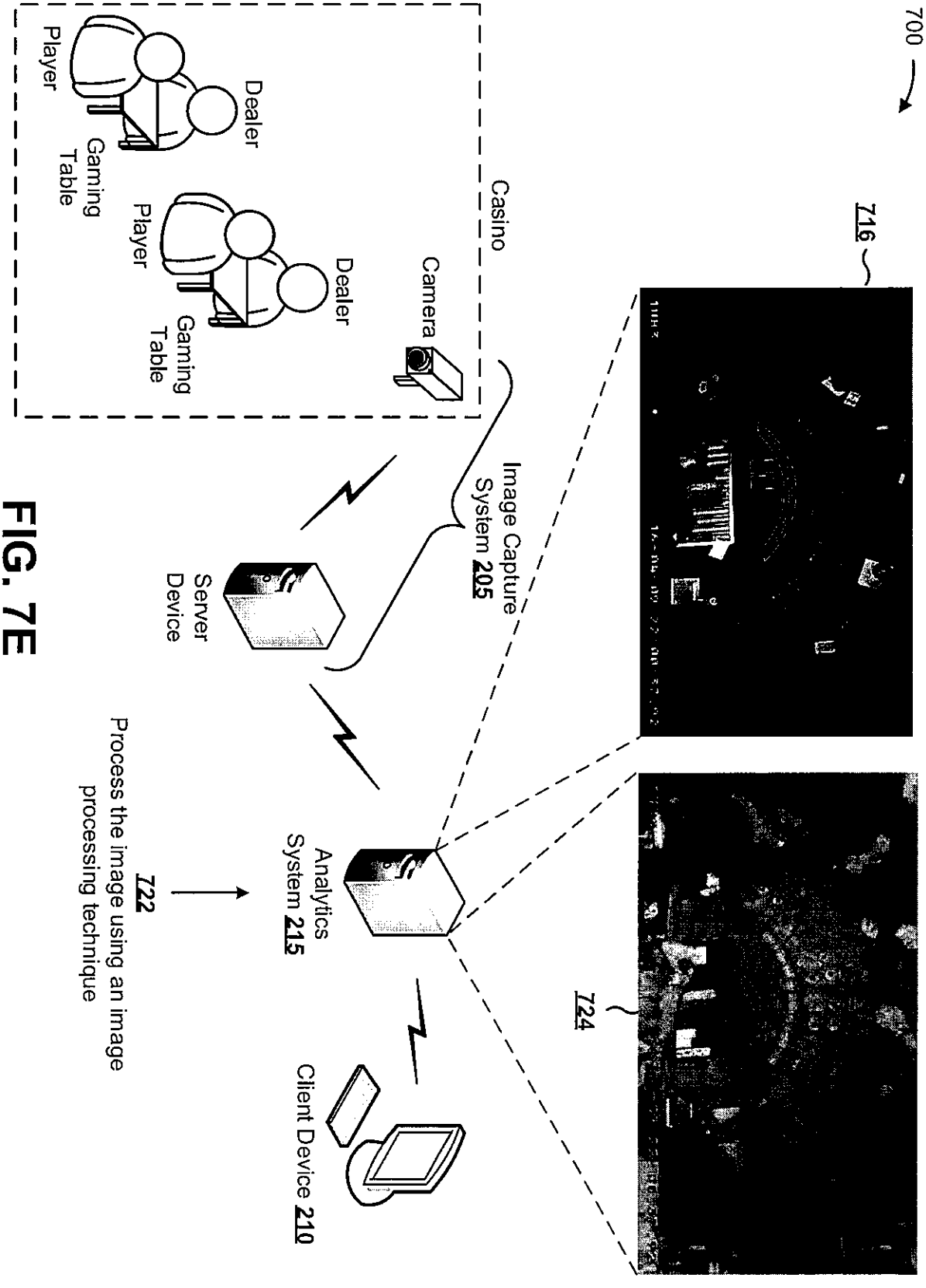
700
716
Casino
Camera
Dealer
Player
Gaming Table
Dealer
Player
Gaming Table
Image Capture System 205
Server Device
Analytics System 215
722
Process the image using an image processing technique
724
Client Device 210

FIG. 7E

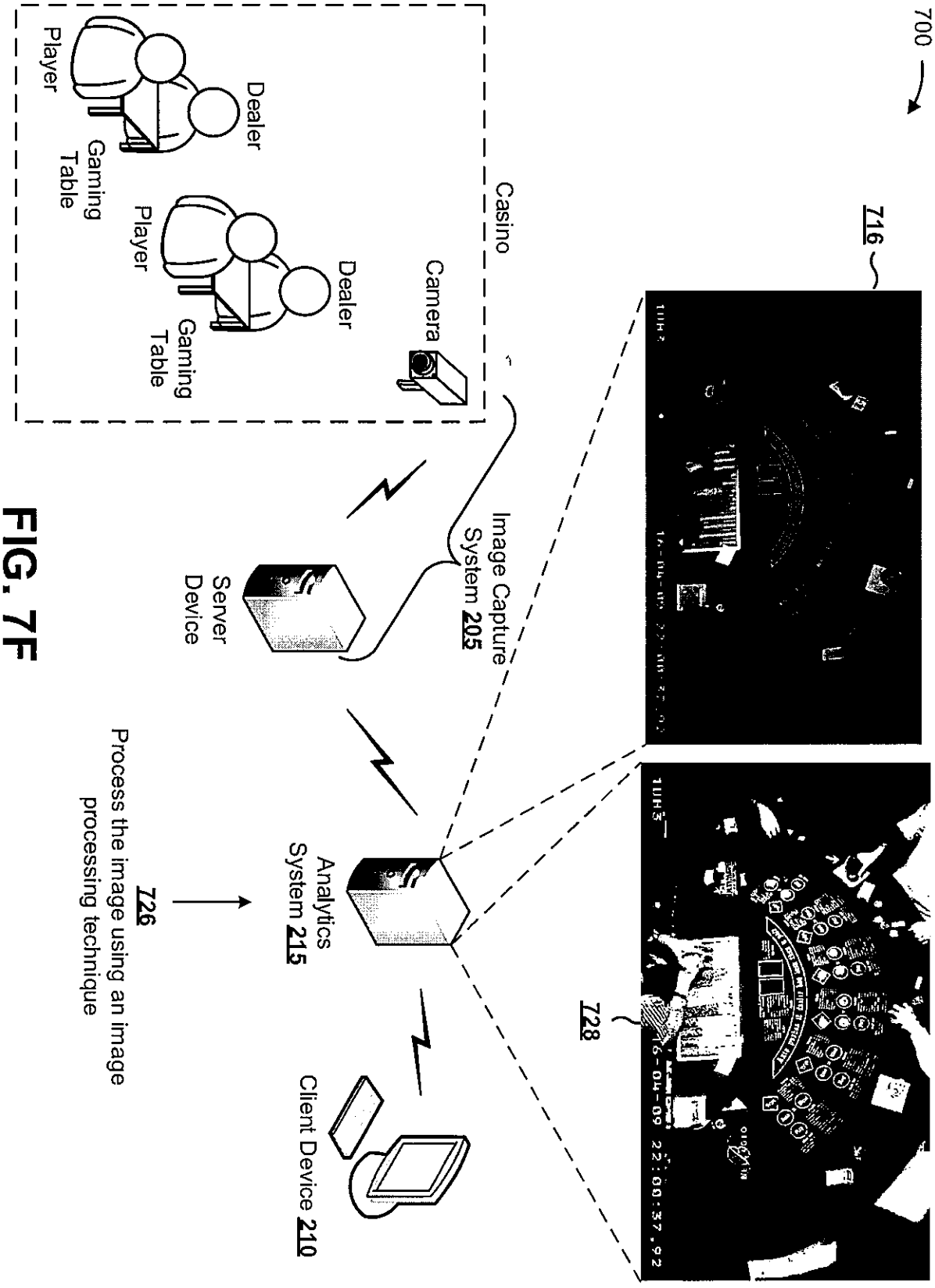
700
716
728
Casino
Camera
Dealer
Player
Gaming Table
Dealer
Player
Gaming Table
Image Capture System 205
Server Device
Analytics System 215
Client Device 210
726
Process the image using an image processing technique

FIG. 7F

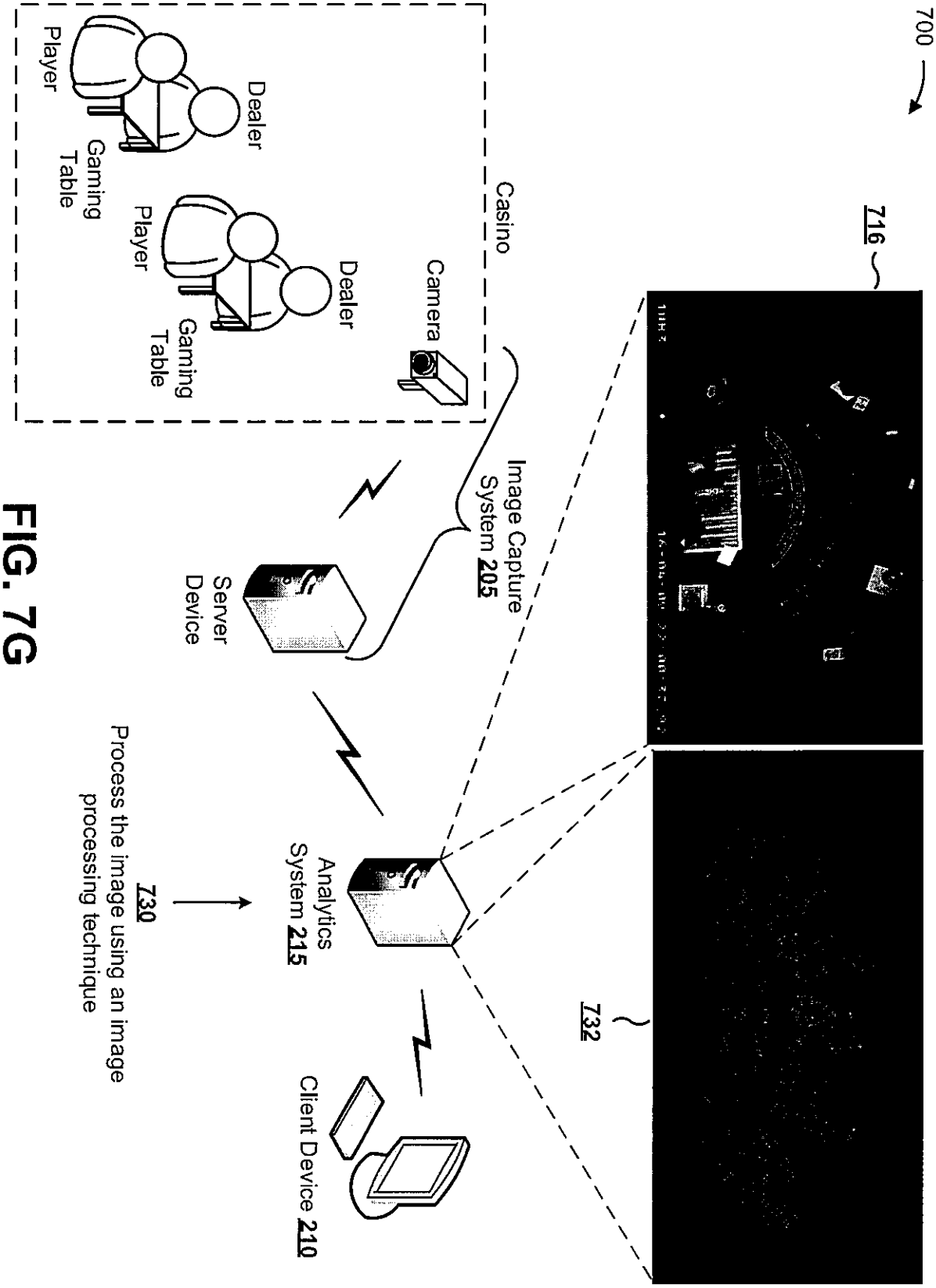
700
716
732
Casino
Camera
Dealer
Player
Gaming Table
Dealer
Player
Gaming Table
Image Capture System 205
Server Device
Analytics System 215
Client Device 210
730
Process the image using an image processing technique

FIG. 7G

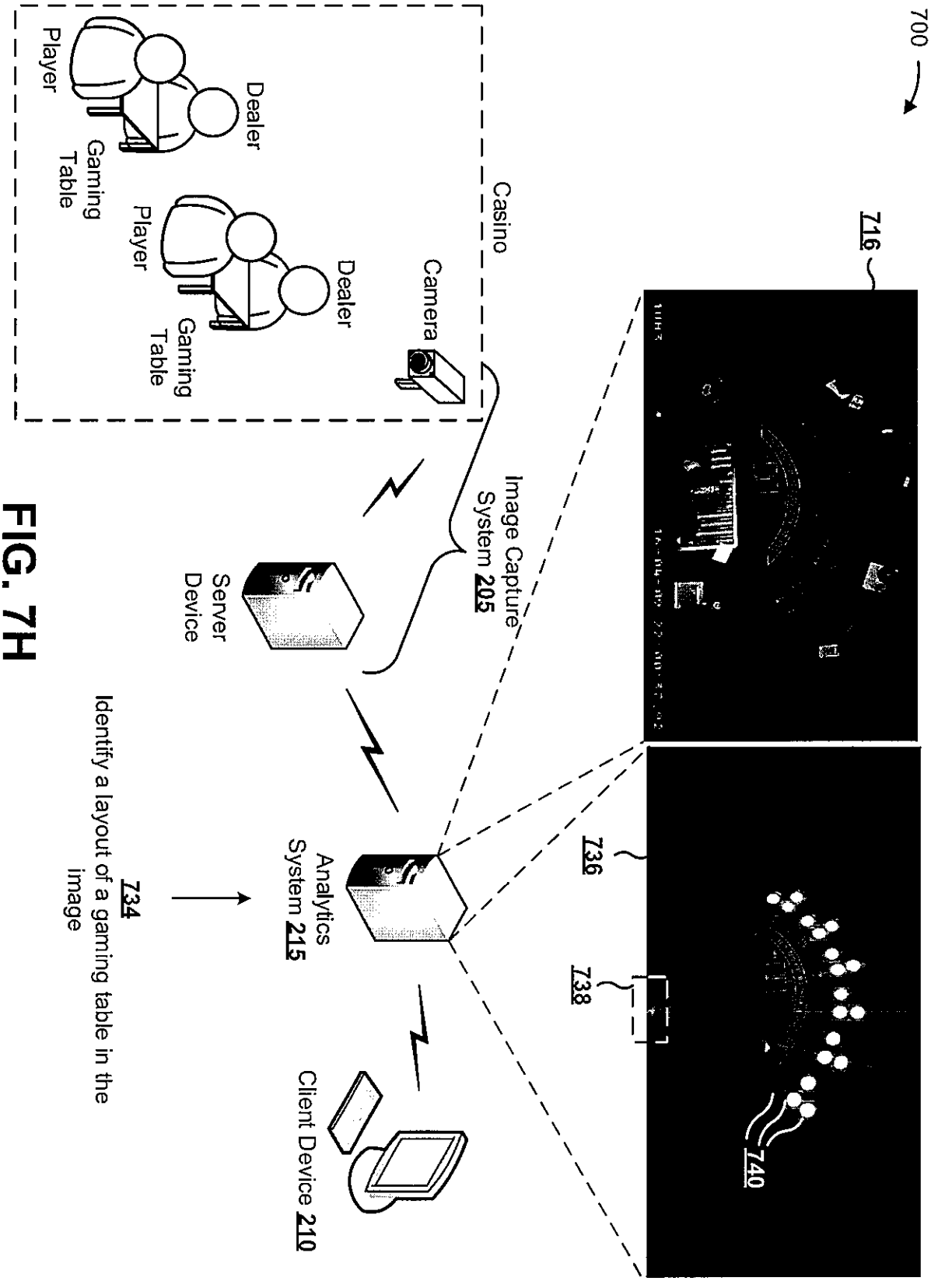
700
716
Casino
Camera
Dealer
Player
Gaming Table
Dealer
Player
Gaming Table
Image Capture System 205
Server Device
Analytics System 215
734
Identify a layout of a gaming table in the image
736
738
740
Client Device 210

FIG. 7H

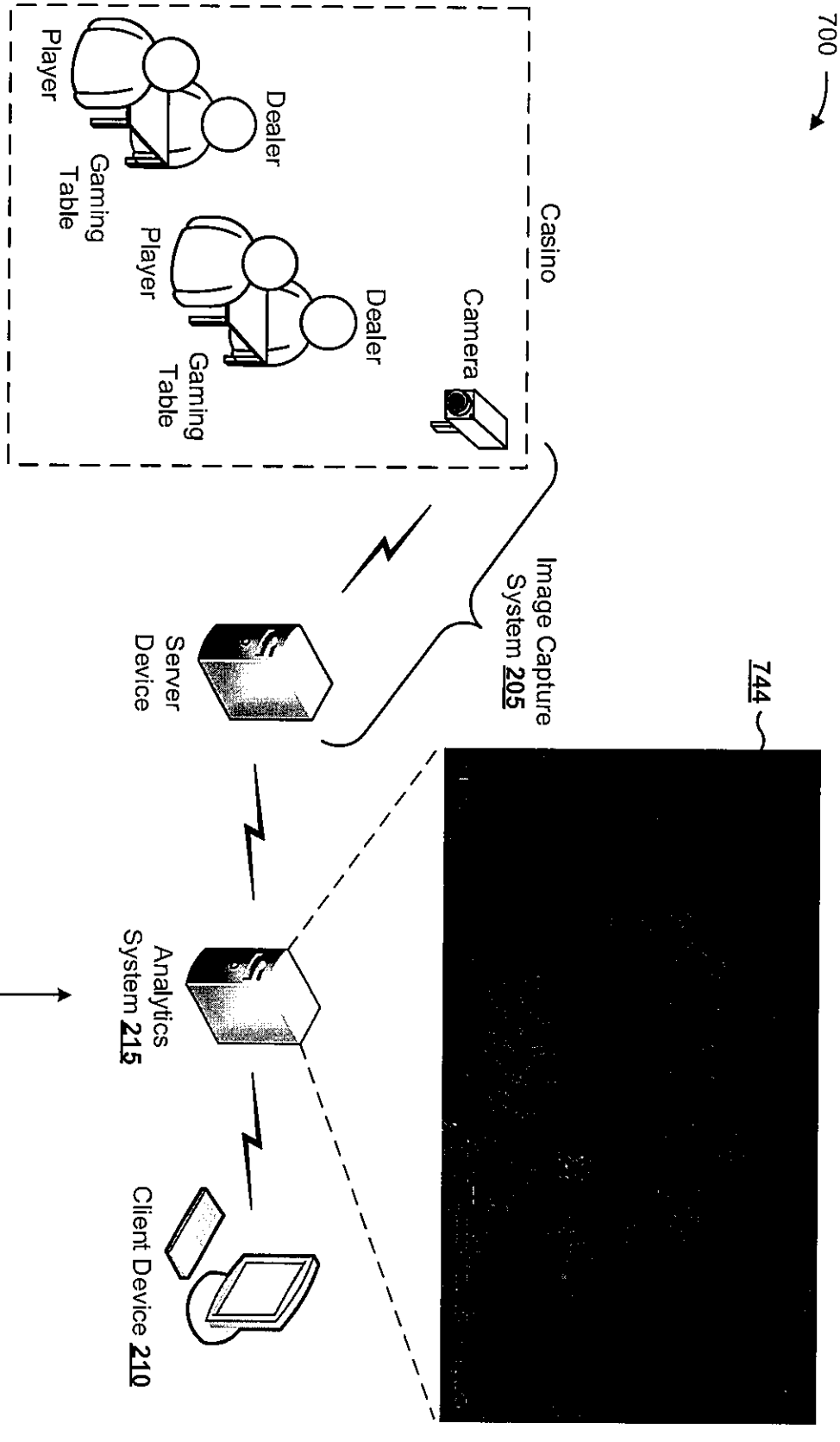
700
Casino
Camera
Dealer
Player
Gaming Table
Dealer
Player
Gaming Table
Image Capture System 205
Server Device
744
Analytics System 215
Client Device 210
742
Receive an image

FIG. 7I

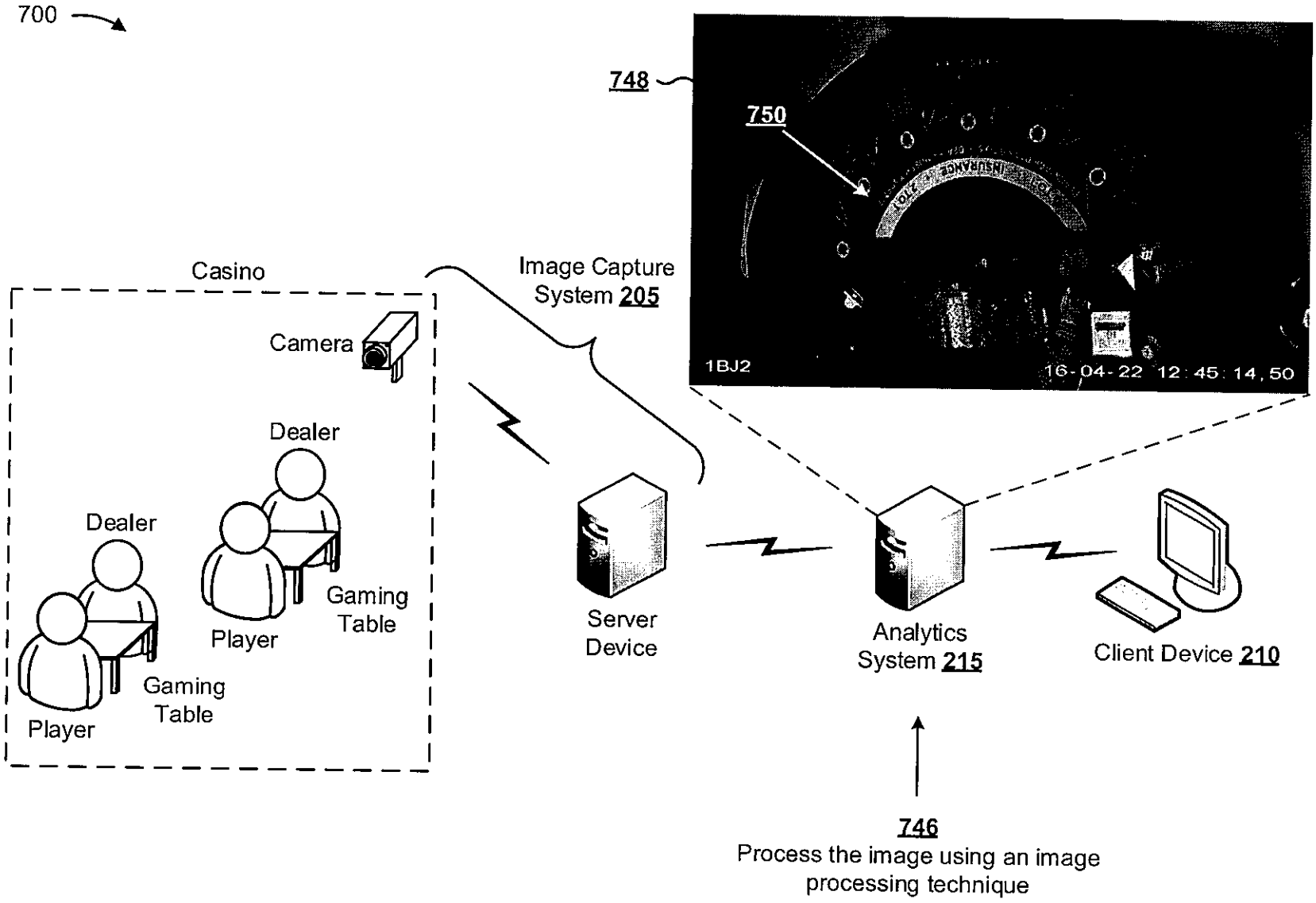
700
748
750
1BJ2
16-04-22 12:45:14,50
Casino
Image Capture System 205
Camera
Dealer
Dealer
Gaming Table
Player
Dealer
Gaming Table
Player
Server Device
Analytics System 215
Client Device 210
746
Process the image using an image processing technique

FIG. 7J

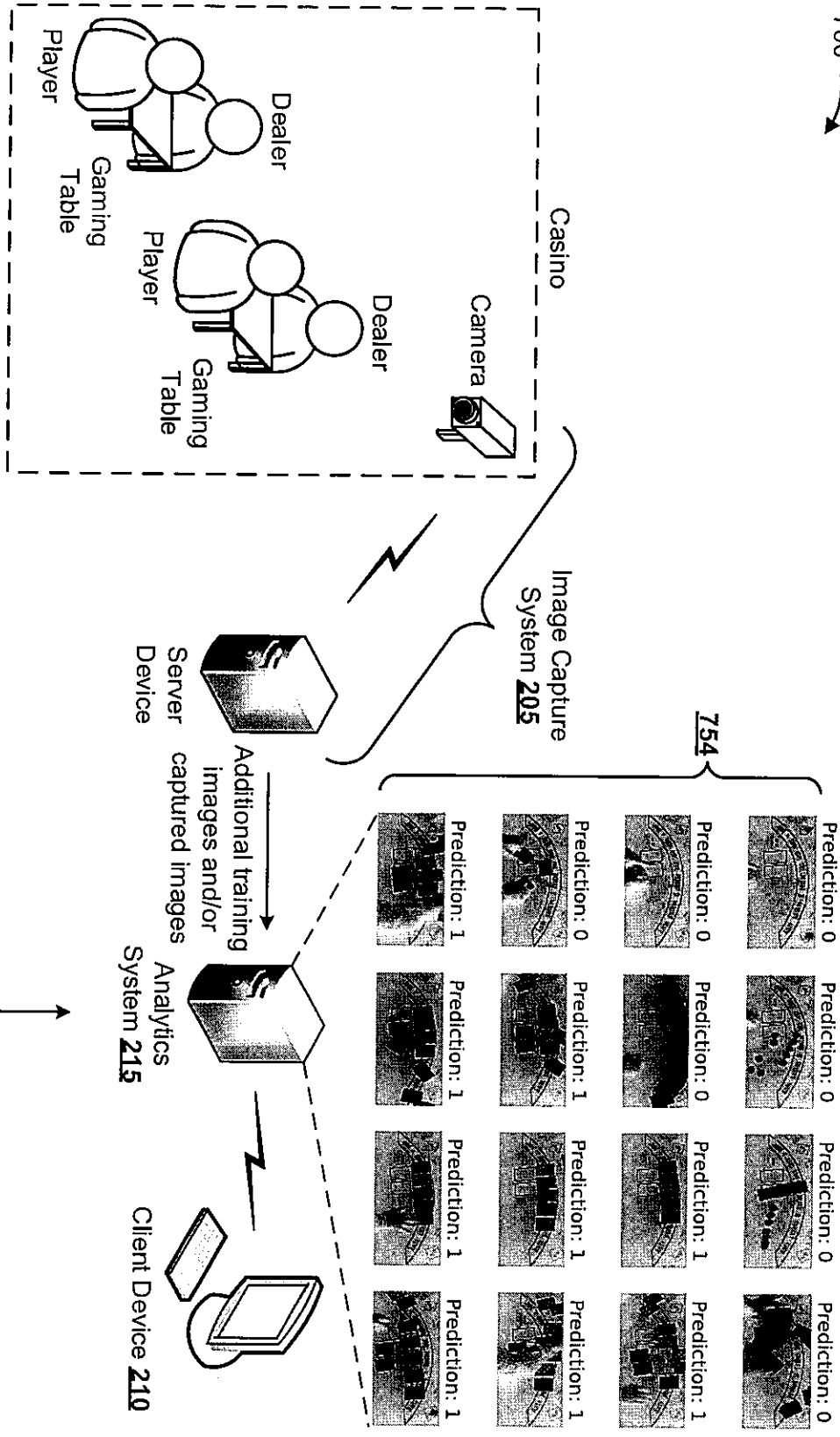
700
Casino
Camera
Dealer
Gaming Table
Player
Dealer
Gaming Table
Player
Image Capture System 205
Server Device
Additional training images and/or captured images
Analytics System 215
Client Device 210
754
Prediction: 0
Prediction: 1
752
Process images using an image processing technique

FIG. 7K

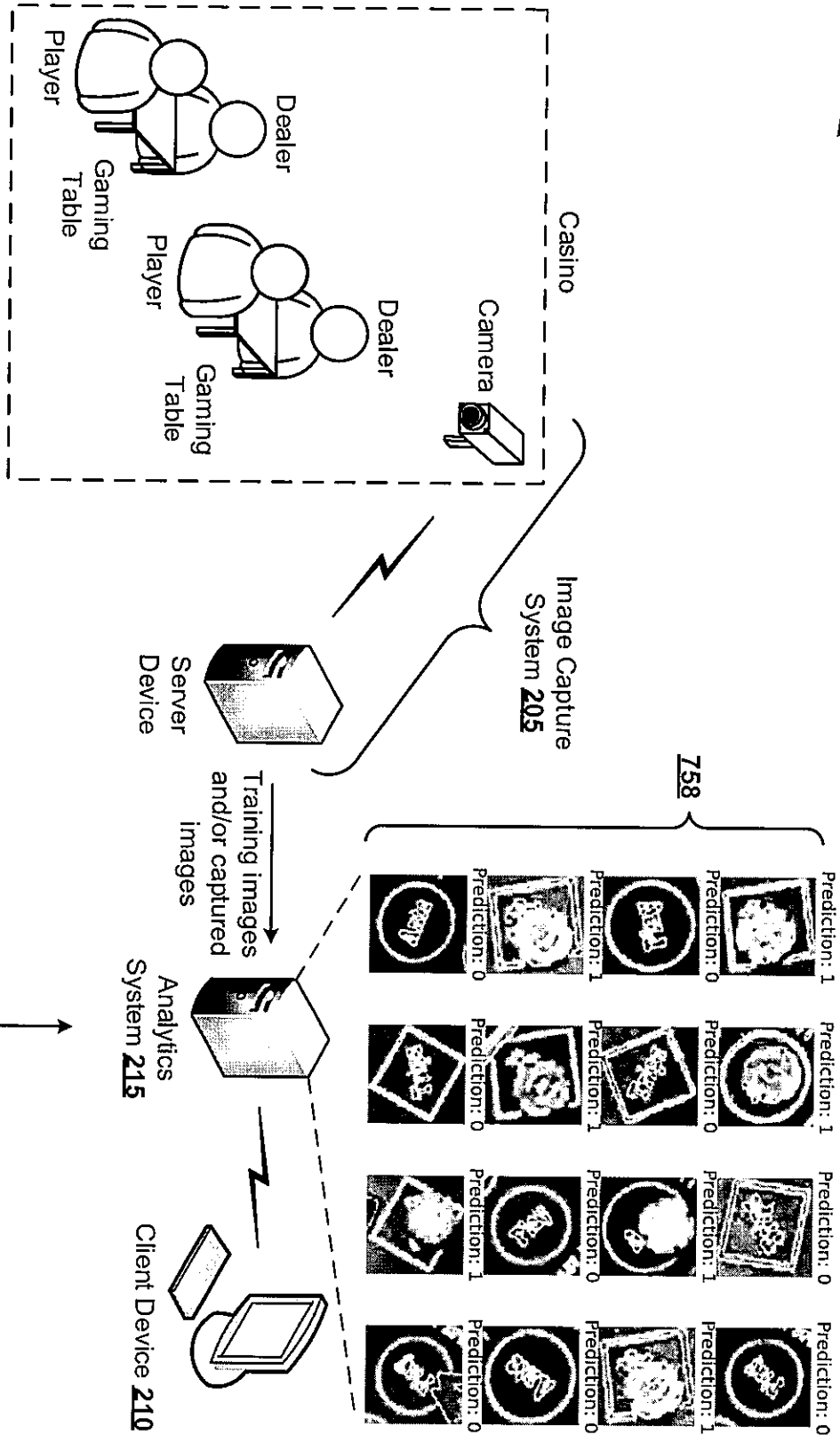
700
Casino
Camera
Dealer
Player
Gaming Table
Dealer
Player
Gaming Table
Image Capture System 205
Server Device
Training images and/or captured images
Analytics System 215
Client Device 210
758
Prediction: 1
Prediction: 0
756
Process images using an image processing technique

FIG. 7L

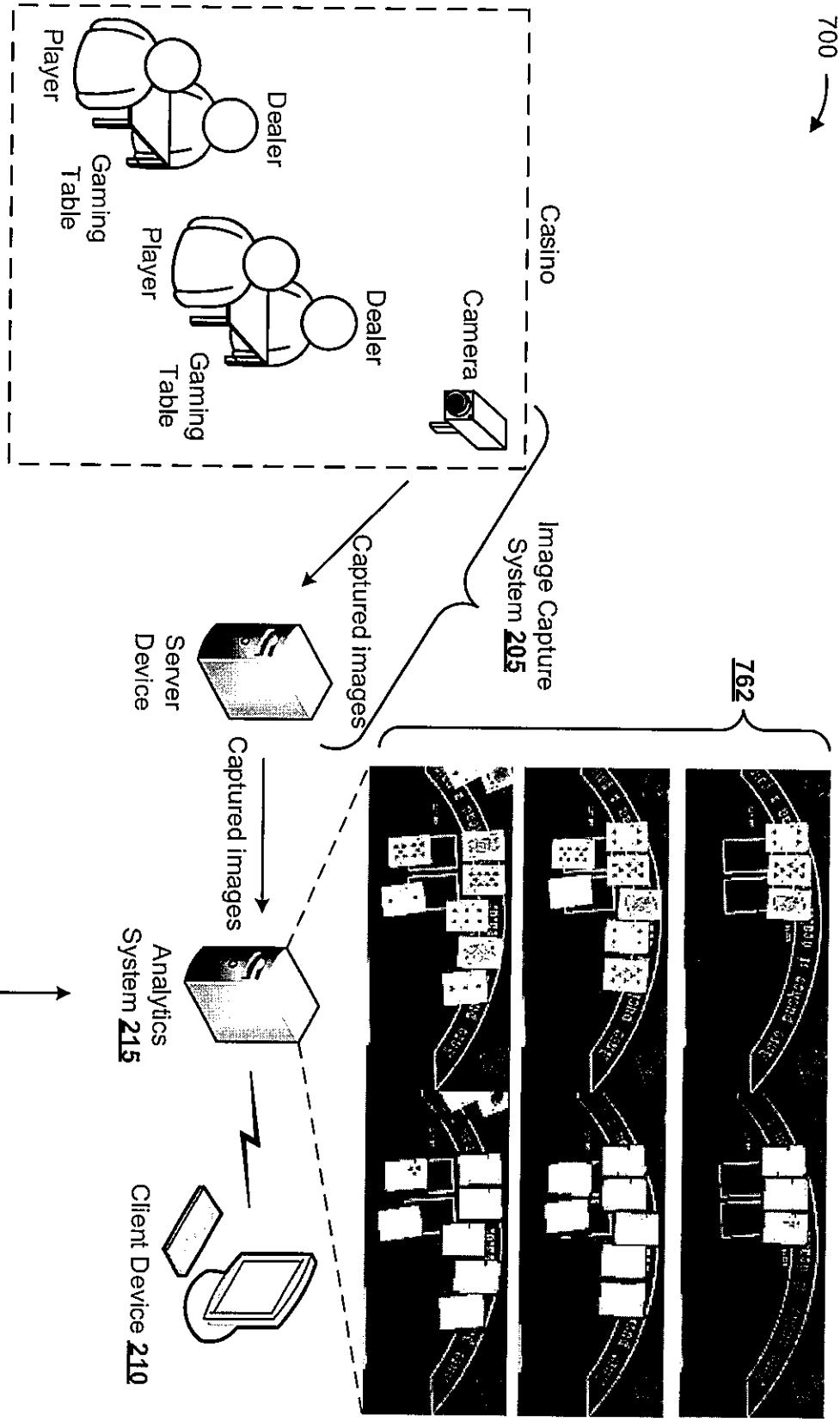
700
762
Casino
Camera
Dealer
Player
Gaming Table
Dealer
Player
Gaming Table
Image Capture System 205
Captured images
Server Device
Captured images
Analytics System 215
Client Device 210
760
Receive an image

FIG. 7M

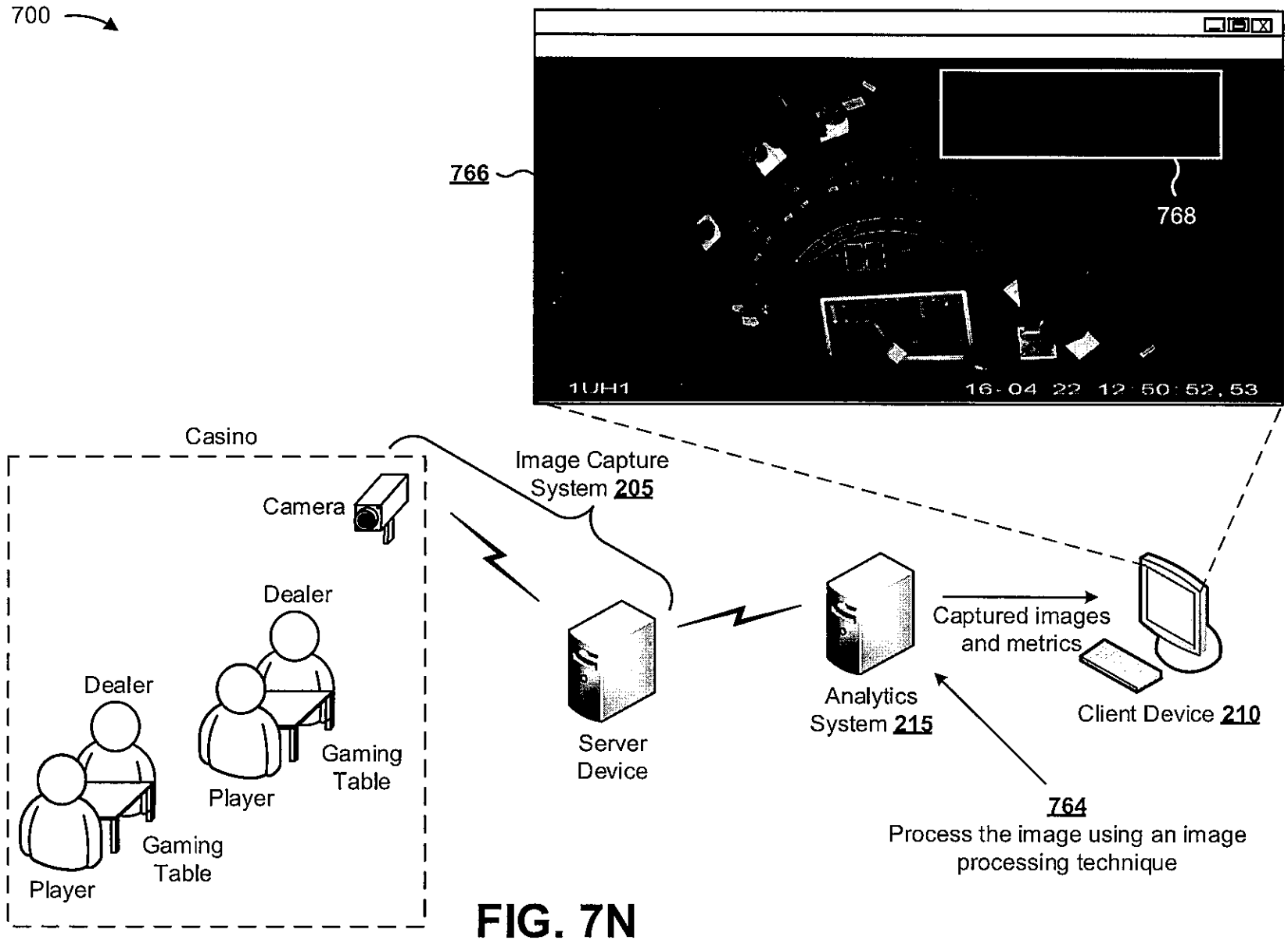
700
766
768
1UH1
16-04 22 12:50:52.53
Casino
Camera
Dealer
Dealer
Player
Gaming Table
Player
Gaming Table
Image Capture System 205
Server Device
Analytics System 215
Captured images and metrics
Client Device 210
764
Process the image using an image processing technique

FIG. 7N