

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION**

**MONUMENT PEAK
VENTURES, LLC,
Plaintiff,**

v.

**ALARM.COM
INCORPORATED,
Defendant.**

§
§
§
§
§
§
§
§
§
§

CASE NO. 6:22-cv-982

JURY TRIAL

COMPLAINT AND JURY DEMAND

Plaintiff Monument Peak Ventures, LLC (“MPV”) brings this action against Alarm.com Incorporated (“Alarm.com”) for infringement of U.S. Patent Nos. 8,665,345, 7,730,036, 8,024,311, 8,305,452 and 7,035,461 and alleges the following:

THE PARTIES

1. Plaintiff, Monument Peak Ventures, LLC, is a Texas Limited Liability Company with its principal place of business in Allen, Texas.
2. Alarm.com Incorporated is a corporation existing under the laws of Delaware and is registered to conduct business in Texas.
3. Alarm.com Incorporated may be served with process through its registered agent, CT Corporation System at 1999 Bryan St., Ste. 900, Dallas, Texas 75201-3136.

JURISDICTION AND VENUE

4. MPV brings this action for patent infringement under the patent laws of the United States, namely 35 U.S.C. §§ 271, 281, and 284-285, among others. This Court has subject-matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

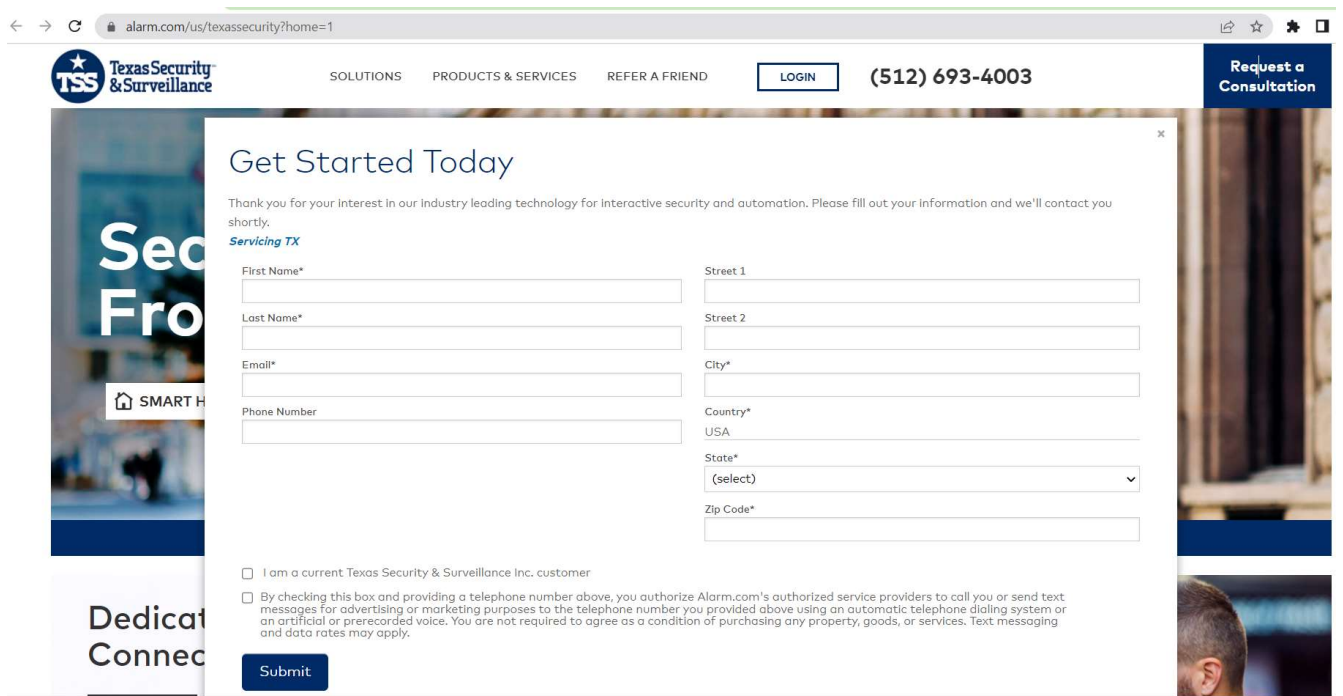
5. Alarm.com is subject to this Court's specific and general personal jurisdiction pursuant to due process and/or the Texas Long-Arm Statute, due at least to its substantial business in this State and judicial district, including: (a) at least part of its infringing activities alleged herein; and (b) regularly doing or soliciting business, engaging in other persistent conduct, and/or deriving substantial revenue from goods sold and services provided to Texas residents including in this district.

6. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391(c) and 1400(b). Alarm.com transacts business in this judicial district, has committed acts of infringement in this judicial district, has purposely sought the privileges and protections of this Court, and conducts business from and through regular and established place of business in this judicial district.

7. Alarm.com advertises via the Alarm.com website and conducts business through its agents, channel partners, representatives, and affiliated providers that sell and install infringing products within this judicial district.

8. Alarm.com maintains a regular and established place of business through its agent Texas Security & Surveillance, Inc. at 2111 Sam Bass Rd. Suite 100 Round Rock, Texas 78681.

9. On its website, Alarm.com directs customers to request a consultation with Texas Security & Surveillance Inc. to purchase Alarm.com products and services.



<https://www.alarm.com/us/texassecurity?home=1>

10. Alarm.com advertises and holds out to the public the Texas Security & Surveillance, Inc. Round Rock, Texas location as an Alarm.com business location (<https://www.alarm.com/us/texassecurity?home=1>).

11. Alarm.com provides notice on its website that the business conducted on it and the Alarm.com products and services provided through Texas Security &

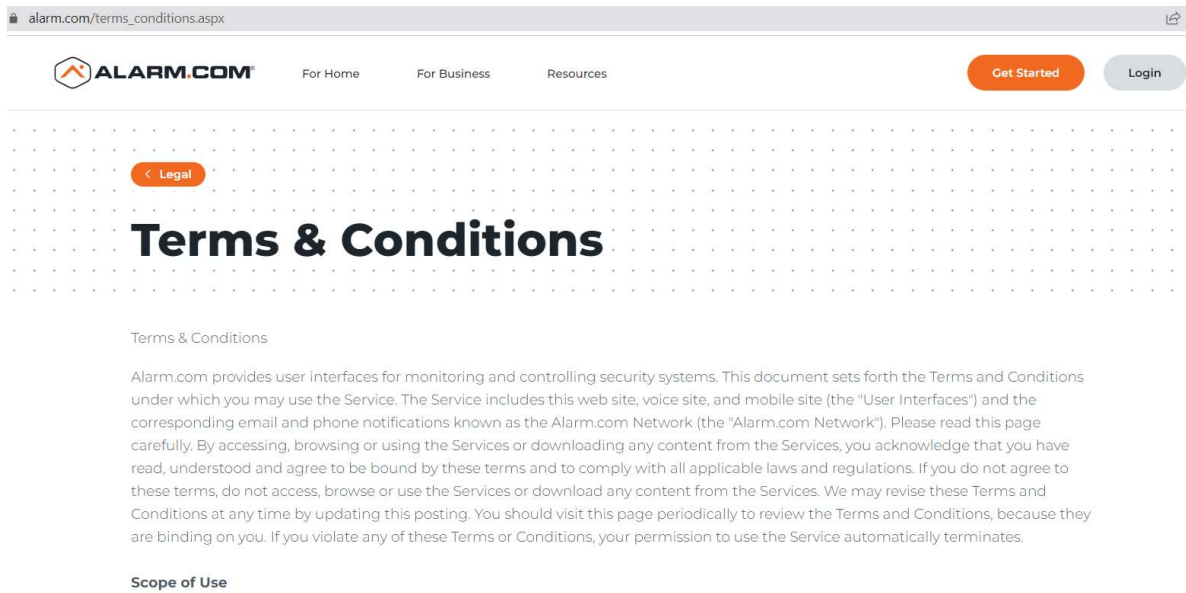
Surveillance, Inc. are Alarm.com products and services subject to the terms and conditions of Alarm.com. Use of the Alarm.com Texas Security & Surveillance business site is subject to and governed by Alarm.com’s privacy policy.

Texas Security & Surveillance Inc. Licenses

Terms & Conditions | Privacy Policy

Copyright © 2000-2022, Alarm.com. All rights reserved.

Alarm.com and the Alarm.com Logo are registered trademarks of Alarm.com.



<https://www.alarm.com/us/texassecurity?home=1>

12. Alarm.com’s website advertises that the products and services provided by its agent, Texas Security & Surveillance, Inc. are “powered by Alarm.com.”



13. Alarm.com maintains a regular and established place of business in this district through its agent Xtreme Home Security at 6448 East Highway 290, Suite E102, Austin, Texas 78723.

14. On behalf of Alarm.com, Xtreme Home Security installs and services Alarm.com security products and systems throughout their service area that includes Austin, Wimberley, Round Rock, Cedar Park and other cities in the judicial district. See <https://www.xtremehomesecurity.com/home-security/alarm-com-dealer>.

15. Alarm.com maintains a regular and established place of business in this district through its agent Therrell Alarm Protection Service at 1618 Exchange Pkwy, Waco, Texas 78712. See https://www.therrellalarm.com/waco-texas/?utm_campaign=gmb.

16. Alarm.com directs and controls the actions of its agents in this district, directs customers to request consultations with its agents, identifies agents and their locations on the Alarm.com website as the local providers of Alarm.com products and services, and provides marketing and advertising materials to its agents to use in acting on behalf of Alarm.com.

17. Alarm.com requires its agents to cooperate with Alarm.com and perform procedures (e.g. testing) as requested by Alarm.com.

18. Alarm.com has sought the privileges and benefits of this Court by

filing suit against a competitor, Protect America, Inc. and stipulating to transfer into this district, thus demonstrating that this Court is a location convenient for Alarm.com. *See Alarm.com Inc., et al. v. Protect America, Inc.*, 1-18-cv-00521 (W.D. Tex.), ECF 38.

19. Alarm.com admits that it “provides its services to security dealers within this district.” *See Alarm.com Inc., et al. v. Protect America, Inc.*, 1-18-cv-00521 (W.D. Tex.), ECF 66 at ¶15.

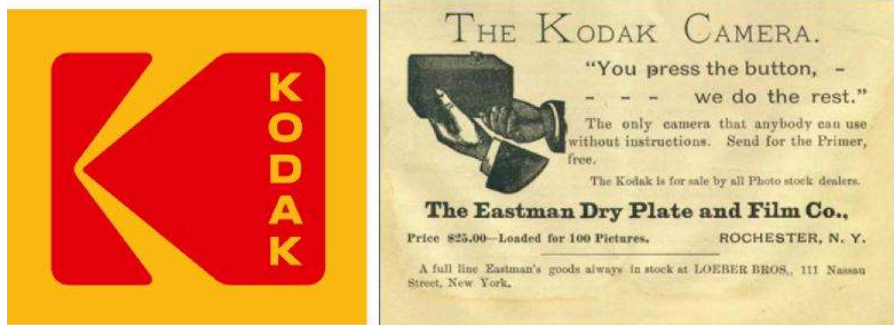
20. Alarm.com admits that it provides services to security dealers including 3D Security Inc. in this District. *See Alarm.com Inc., et al. v. Protect America, Inc.*, 1-18-cv-00521 (W.D. Tex), ECF 66 at ¶15. Alarm.com asserts that individuals from 3D Security Inc. and/or their customers within this District may have key information that was relevant to Alarm.com’s patent infringement lawsuit against Protect America. *Id.* Alarm.com’s lawsuit against Protect America involved allegations that Protect America’s smart connect applications, website, security cameras and devices infringed Alarm.com’s patents. *Id.* at ¶ 5.

MONUMENT PEAK VENTURES

21. MPV owns a portfolio of patents invented by the Eastman Kodak Company. Since acquiring the Kodak portfolio, MPV has promoted adoption of technologies claimed in the Kodak portfolio and has entered into license agreements with over forty companies.

22. The Asserted Patents claim inventions born from the ingenuity of the Eastman Kodak Company, an iconic American imaging technology company that dates back to the late 1800s.

23. The first model of a Kodak camera was released in 1888.



24. In 1935, Kodak introduced “Kodachrome,” a color reversal stock for movie and slide film.

25. In 1963, Kodak introduced the Instamatic camera, an easy-to-load point-and-shoot camera.



26. By 1976, Kodak was responsible for 90% of the photographic film and 85% of the cameras sold in the United States.

27. At the peak of its domination of the camera industry, Kodak invented the first self-contained digital camera in 1975.



28. By 1986, Kodak had created the first megapixel sensor that was capable of recording 1,400,000 pixels.

29. While innovating in the digital imaging space, Kodak developed an immense patent portfolio and extensively licensed its technology in the space.

30. In 2010, Kodak received \$838,000,000 in patent licensing revenue.

31. As part of a reorganization of its business, Kodak sold many of its patents to some of the biggest names in technology that included Google,

Facebook, Amazon, Microsoft, Samsung, Adobe Systems, HTC and others for \$525,000,000.

32. While scores of digital imaging companies have paid to license the Kodak patent portfolio owned by MPV, Alarm.com, without justification, has refused to do so.

NATURE OF THE ACTION

33. MPV asserts that Alarm.com infringes, directly and indirectly, certain claims of U.S. Patent Nos. 8,665,345, 7,730,036, 8,024,311, 8,305,452 and 7,035,461 (the “MPV Asserted Patents”).

34. A true and correct copy of U.S. Patent No. 8,665,345 (the “345 Patent”), titled “Video Summary Including a Feature of Interest,” is attached as Exhibit A.

35. A true and correct copy of U.S. Patent No. 7,730,036 (the “036 Patent”), titled “Event-Based Digital Content Record Organization,” is attached as Exhibit B.

36. A true and correct copy of U.S. Patent No. 8,024,311 (the “311 Patent”), titled “Identifying Media Assets from Contextual Information,” is attached as Exhibit C.

37. A true and correct copy of U.S. Patent No. 8,305,452 (the “452 Patent”), titled “Remote Determination of Image-Acquisition Settings and

Opportunities,” is attached as Exhibit D.

38. A true and correct copy of U.S. Patent No. 7,035,461 (the “’461 Patent), titled “Method for Detecting Objects in Digital Images,” is attached as Exhibit E.



39. Alarm.com offers a comprehensive suite of cloud-based solutions for smart residential and commercial properties, including interactive security, video monitoring and access control.

40. Alarm.com sells its security as a services and products for residential and commercial customers directly and through its North American agents.

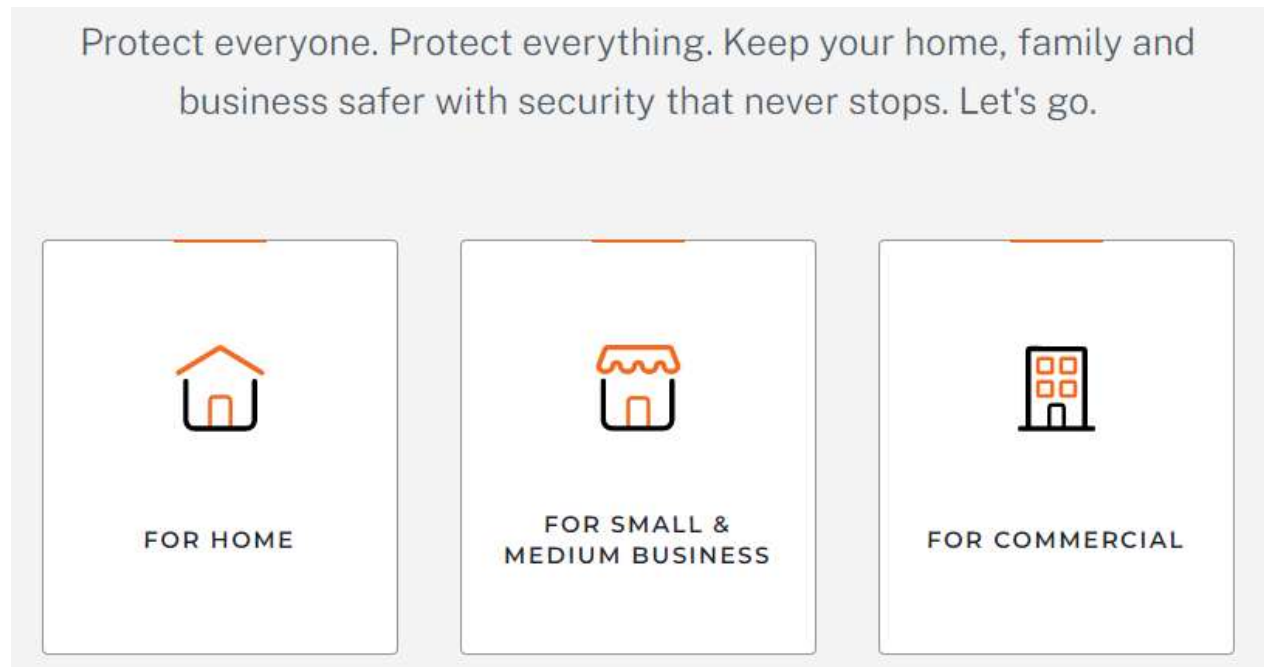
41. Millions of property owners depend on Alarm.com’s technology to intelligently secure, automate and manage their residential and commercial properties.

42. In 2021, Alarm.com platforms processed more than 200 billion data points generated by over 100 million connected devices.

43. Alarm.com is the leading platform for intelligently connected

property.

44. Alarm.com directly and through its sales representatives and agents sells its integrated platform, cameras, and sensors along with professional installation and monitoring.



https://alarm.com/?gclid=Cj0KCQjw94WZBhDtARIsAKxWG-8zYEHLrYIdx0RnX7KCVRJ5yBfRB0gNr3lbbDEwutdxxDsUXBKjHcAaAjJ8EALw_wcB

45. Alarm.com integrates smart cameras (indoor, outdoor, doorbell) to its cloud-based platform.



Perfect for any location

Indoor, outdoor, front door — our cameras have you covered.

https://alarm.com/home-security-video?gclid=Cj0KCQjw94WZBhDtARIsAKxWG--LizYVvCxTGWvZz8nzCdfOQX5mzuLU9p0mUHq8Cdq2rUuj_apJp_4aAubsEALw_wcB

46. Alarm.com provides a fully integrated solution for consumers (residential and commercial) which includes hardware, software, sales, installation, and support.

47. Alarm.com makes, uses, offers to sell, sells, and/or imports products including indoor, outdoor and doorbell cameras including but not limited to the 1080p Indoor Wi-Fi Camera (ADC-V515); ADC-V520, ADC-V520IR, ADV-V521IR, 1080p Indoor Wi-Fi Camera (ADC-V523/523X), Indoor Fixed w/IR (ADC-V522IR); Outdoor Wireless (ADC-V722W); 1080p Outdoor Wi-Fi Camera

(ADC-V723/723X), 1080p Outdoor Wi-Fi Camera with Two-Way Audio (ADC-V724/724X), ADC-V620PT, 180° HD Camera (ADC-V622), Indoor/Outdoor Mini Bullet (ADC-VC726), ADC-VDB770, ADC-VC728PF, ADC-V820, ADC-V821, ADC-VC825, Indoor/Outdoor Dome (ADC-VC826), Indoor/Outdoor Bullet Camera (ADC-VC736), Indoor/Outdoor Turret Camera (ADC-VC836), Pro Series 1080p Dome PoE Camera (ADC-VC827P), Pro Series 1080p Dome PoE Camera with Varifocal Lens (ADC-VC847PF), Pro Series 4MP Varifocal Turret Camera (ADC-VC838PF), ADC-VS120, ADC-VS121, ADC-VS420, ADC-VDB101/2, ADC-VDB105/6, ADC-VDB770 Wi-Fi Video Doorbell, Wi-Fi Doorbell Camera ADC-VDB Skybell HD, Alarm.com AD-VDB105X Slim Line II Wi-Fi Doorbell Video, ADC-V622 Alarm.com Wireless Indoor 1090p HD Wide Angle, ADC-VG22-WELL Wellcam-Wellness 180 Degree HD Camera, Alarm.com compatible cameras, and all other similar products (“Alarm.com Camera Products”), applications available on both Android and iOS including the Alarm.com app, the Alarm.com web portal, dashboard and website and all other similar products which allow users to view playback features (“Alarm.com App”), Alarm.com video services (e.g. Pro Video, Video Analytics, Premium Video), Alarm.com Residential Interactive Services, Commercial Interactive Services, Video Expansion Service, Alarm.com OpenEye software, platform and services, and any Alarm.com video monitoring services and products (“Video”), sensors including

door and window sensors including surface-mounted, recessed, motion sensors, glass break detector and water sensors and all other similar products (“Sensors”), and storage via the cloud and on Alarm.com video recorders including but not limited to CSV126, CSV2000P, CSV2008P, CSV2016P and all other similar products (“Storage”).

48. The Alarm.com products and services accused in this case include the Alarm.com security and monitoring services, Alarm.com Camera Products, Video, Alarm.com App, Sensors, and Storage and all other similar products.

49. Alarm.com realizes substantial value from using the subject matter claimed in the Asserted Patents in products such as Alarm.com security and monitoring services, Alarm.com Camera Products, Video, Alarm.com App, Sensors, and Storage and all other similar products.

Alarm.com’s Knowledge of the Asserted Patents and Refusal to License

50. On October 25, 2021, MPV contacted Alarm.com concerning its infringement and provided Alarm.com information concerning the Kodak patent portfolio, including charts detailing their infringement of the ’345, ’036, ’311 and ’452 Patents, and offering licensing opportunities.

51. Representatives of MPV and Alarm.com participated in a teleconference on July 21, 2022, but since that initial meeting, Alarm.com has been uncommunicative.

52. Since those initial communications, Alarm.com has continued to use, sell, offer for sale, and/or import into the United States its infringing products through the filing of this Complaint. Alarm.com never responded.

53. With knowledge of MPV's patents and how MPV alleges Alarm.com infringes them, Alarm.com continued its infringing activity with knowledge of the Asserted Patents recklessly disregarding MPV's patent rights and intentionally ignoring MPV's requests to discuss licensing.

54. Alarm.com's infringement has been ongoing, willful and in bad faith since at least October 25, 2021.

MPV's '345 PATENT

55. The Patent Office issued the '345 Patent on March 4, 2014, following a full and thorough examination of Application No. 13/110,085, filed on May 18, 2011.

56. Titled "Video Summary Including a Feature of Interest," the '345 Patent generally pertains to the improved formation of a digital video summary and more particularly is directed to solving the problems of providing a quick, readily sharable, and particularized summary of a digital video.

57. Back in May 2011, managing digital video content was a difficult task. One difficulty was facilitating a quick review and sharing of captured videos. Videos were often represented visually with a thumbnail image of the first frame of

the video and thus did not necessarily provide much insight into the content of the video. Determining whether something specific was contained in a given video often required viewing the entire video which could be time consuming, especially for a lengthy video.

58. Managing digital videos presented practical problems too. For example, many digital capture devices recorded video at 30 or 60 frames per second at spatial resolutions of 1920 x 1080 pixels. Even when compressed, the amount of data generated for even a relatively short video could make it impractical to share.

59. Manually creating a tailored video summary to provide context for specific features within the summary (e.g., people, pets, events, locations, activities, or objects) was an undesirably tedious process.

60. Although video editing software could be used to manually summarize a video into a shorter version that could be shared more easily, this type of editing was a lengthy and laborious process. Many users were not interested or skilled in manual editing, and complex summarization algorithms required decoding the video to perform the analysis required to make the video summary. Thus, it was not possible on a digital capture device to immediately view a video summary corresponding to a just-captured video. This shortcoming made it difficult to facilitate quick review and sharing of captured videos.

61. The state of the art at the time of the invention did not include using metadata generated in real time to construct a real-time video summary.

62. The '345 claims neither describe nor claim a concept or a generic computerized system. Instead, the claims address, among other things, a persistent problem unique to digital video cameras at the time of the invention: capturing videos created large video files that were difficult for camera users to use and manage.

63. The '345 Patent claims systems and methods for computing a video summary to automatically analyze image frames in a video sequence using a feature recognition algorithm and to identify a subset of the image frames that contain the feature or a desired characteristic. Then a video summary is formed including at least part of the identified subset of image frames containing the feature of interest and having the desired characteristic. Analyzing the video frames at the time of capture to determine a subset of video frames containing a feature of interest eliminates the need to decompress the video data at the time the video summary is created and is a technical solution to a technical problem.

64. A person of ordinary skill in the art at the time of the invention would recognize that the steps and methods claimed by the '345 Patent were unconventional and would understand that the conventional ways of generating a video summary were time-consuming and tedious as well as not being easily

sharable and not necessarily specifically reflective of specific content in the video.

65. The novel use and arrangement of the specific combination, steps, system, and devices recited in the '345 Patent were not well-understood, routine, or conventional to a person skilled in the relevant field at the time of the inventions. In particular, the combination of steps in at least claim 16 of the '345 Patent were not well understood, routine, or conventional to a person of skill in the relevant field at the time of the inventions.

66. For example, during prosecution of the '345 Patent, the patent examiner acknowledged that the primary prior art reference did not disclose “reference data separate from a reference in the captured video sequence” that is used to “form a video summary . . . containing the feature of interest.” The cited combination of references did not disclose, among other things, reference data including information specifying a “desired characteristic” of the image frames or a video summary including fewer than all of the image frames in the captured video sequence, wherein the video summary includes at least part of the identified subset of image frames containing the feature of interest and having the “desired characteristic.”

67. Comparing the inventions claimed in the '345 Patent with the state of the art illustrates, in part, the unconventionality and inventiveness of the claimed inventions.

68. Features of the subject matter claimed in the '345 Patent claims mark inventive advantages over conventional prior art and overcame the shortcomings noted above. Thus, the novel use and arrangement of the specific combination, steps, system, and devices recited by the '345 Patent were not well-understood, routine, or conventional to a person skilled in the relevant field at the time of the inventions.

69. The '345 Patent claims systems and methods for computing a video summary that improved upon the prior art systems and methods, providing the advantages of allowing a relatively small video summary to be generated on a digital device with minimal delay at the completion of video capture and providing a particularized video summary that contains a specified desired characteristic of the image frames.

MPV's '036 PATENT

70. The Patent Office issued the '036 Patent on June 1, 2010.

71. The '036 Patent, titled "Event-Based Digital Content Record Organization," generally relates to the field of digital image processing, and more particularly, to event-based organization of digital images, video, and audio files.

72. At the time the application leading to the '036 Patent was filed, collections of digital images, videos and/or audio files were manually organized and shared into collections and shared, for example, by uploading digital content

online and self-selecting content relating to particular events.

73. The invention described in the '036 Patent improves upon this process through the identification of “event boundaries” that are applied to metadata associated with digital content, such that the content is organized based upon the metadata. The claimed subject matter further describes defining event boundaries based on objects that are identified through object recognition metadata within digital content.

74. Prior art methods of digital content organization lacked means to identify and select event boundaries based on a wide variety of metadata, including object recognition, location, and geographic location. The '036 Patent improved upon the prior art by: (1) automating selection criteria for digital content organization; (2) expanding the selection criteria available for the organization of digital content; (3) improving the accuracy of automated organization of digital content into events; and (4) associating digital content selection and organization with internet geolocation features.

75. The shortcomings of the prior art digital content organization methods were solved by the unconventional and inventive methods and systems claimed in the '036 Patent. A person of ordinary skill in the art at the time of the invention would recognize the steps and methods claimed in the '036 Patent were unconventional and described methods and systems of event-based organization of

digital content that were not routine or well-understood.

MPV's '311 PATENT

76. The Patent Office issued the '311 Patent on September 20, 2011.

77. The '311 Patent, titled "Identifying Media Assets from Contextual Information," generally relates to the field of assisted annotation and retrieval of digital media assets, such as digital still images or video.

78. In 2008, when the application leading to the '311 Patent was filed, access and retrieval of digital still images and video had become increasingly daunting as the amount of digital image content to search drastically increased compared to access and retrieval of physical film.

79. An existing solution to the problem of searching, accessing, and retrieving digital content was manual annotation using text labels stored in a database to be retrieved by keyword. But manual annotation was both tedious and time consuming. Algorithms that were available at the time were ill-suited to replacing the manual process because they suffered from a lack of accuracy and required excessive effort by the user to adapt and apply.

80. The subject matter described and claimed in the '311 Patent improved upon these prior art systems by using events to identify media assets having associated contextual information.

81. The methods and systems described in the '311 Patent improved upon

the prior art by: (1) providing for automated identification of media assets that are based on an event relevant to received contextual information; (2) providing a superset of captured images based on the contextual information; and (3) providing enhanced search results from the superset using an additional set of contextual information received after the first set.

82. The shortcomings of prior art image enhancement methods were addressed by the unconventional and inventive methods and systems claimed in the '311 Patent.

83. A person of ordinary skill in the art at the time of the invention would recognize the steps and methods claimed in the '311 Patent were unconventional and the claimed methods and systems for image enhancement were not routine or well-understood.

MPV's '452 PATENT

84. The Patent Office issued the '452 Patent on November 6, 2012.

85. The '452 Patent, titled "Remote Determination of Image-Acquisition Settings and Opportunities," generally relates to remote determination of image-acquisition settings for a digital camera using pre-image-acquisition information.

86. At the time of the invention, digital cameras relied upon users selecting a "scene mode" (e.g., a "snow," "portrait," or "backlit") setting on the camera to set certain image acquisition settings (e.g., gain, and exposure time).

One method for improving the camera's image acquisition capabilities was to increase the number of "scene" options available to the user. But increasing the number of possible scene scenarios led to users being overwhelmed by the number of options, and difficult-to-navigate menus added to the problem of users finding the appropriate setting.

87. Attempts to automate image acquisition settings tended to be computationally intensive thus increasing the cost and energy consumption of the camera and/or causing a highly undesirable lag between shutter trip and image acquisition. Such lag is particularly undesirable when a subject to be photographed is in motion.

88. The '452 Patent provided a technical solution to address these problems, in part, by remotely obtaining pre-image-acquisition information such as audio information, illumination information, camera position information, camera orientation information, motion information, an announcement of the digital camera's presence, temperature information, humidity information, ceiling detection information, distance-to-subject information, and spectral information.

89. This enables determination of image-acquisition settings where data-processing resources and available data sources exceed those within the digital camera.

90. A person of ordinary skill in the art at the time of the invention would

recognize that the steps and methods claimed in the '452 Patent were unconventional and would understand that the conventional way of generating image-acquisition settings was excessively complex and/or caused undesirable lag.

91. The novel use and arrangement of the specific combination, steps, system, and devices recited in the '452 Patent were not well-understood, routine, or conventional to a person skilled in the relevant field at the time of the inventions. In particular, the combination of steps in at least Claim 1 of the '452 Patent was not well-understood, routine, or conventional to a person of skill in the relevant field at the time of the inventions.

92. Comparing the subject matter claimed in the '452 Patent with the conventional, state of the art systems at the time of the invention highlights the unconventionality and inventiveness of the inventions. The inventive features claimed in the '452 Patent mark significant advantages over the prior art and addressed the shortcoming noted above.

93. The systems and methods claimed in the '452 Patent for remote determination of image-acquisition settings improved upon the prior art and provided the advantages of allowing a relatively simpler and more cost-effective digital camera to be produced without undesirable lag between shutter trip and image acquisition.

MPV's '461 PATENT

94. The Patent Office issued the '461 Patent on April 25, 2006.

95. The '461 Patent is titled "Method for detecting objects in digital images" and relates generally to the field of digital image processing and, more particularly, to a method for detecting an object in a digital image.

96. At the time the application for the '461 Patent was filed, conventional object detection techniques, particularly with respect to the detection of redevye in photographs, were dependent on detecting pixels in an image that had the color characteristics of the redevye defect. These conventional techniques relied on detecting candidate redevye pixels based on shape, coloration, and brightness, and in certain circumstances only searching those portions of an image that were skin-colored.

97. The prior art systems and methods did not, however, determine whether the candidate pixels are located in a face or part of a human eye and/or could not detect face regions in their entirety or, more specifically, detect face regions as well separated skin color regions.

98. The shortcomings in the conventional prior art were solved by the unconventional and inventive methods claimed by the '461 Patent.

99. Claim 3 of the '461 Patent covers "[a] method for detecting objects in a digital image, comprising the steps of: a) generating a first segmentation map of

the digital image according to a non-object specific criterion; b) generating a second segmentation map of the digital image according to an object specific criterion; and c) detecting objects in the digital image using both the first and second segmentation maps [] further comprising the step of detecting objects using pattern matching in the first and second segmentation maps respectively and merging the detected objects.”

100. A person of ordinary skill in the art at the time of the invention would recognize that the steps and methods claimed in at least claim 3 of the '461 Patent were unconventional and describe detecting objects in a digital image in a way that was not routine.

101. A skilled artisan would recognize that the conventional digital image object detection approaches presented the problems of not being able to fully recognize objects, for instance, faces.

102. The '461 Patent, in at least one embodiment, provides technical solutions to these and other deficiencies in the prior art by teaching a method for detecting objects in a digital image, comprising the steps of: a) generating a first segmentation map of the digital image according to a non-object specific criterion; b) generating a second segmentation map of the digital image according to an object specific criterion; and c) detecting objects in the digital image using both the first and second segmentation maps and further comprising the step of detecting objects

using pattern matching in the first and second segmentation maps respectively and merging the detected objects.

103. A person skilled in the art at the time of the invention of the '461 Patent would understand that the claims, including at least claim 3, recite steps operating in an unconventional manner to achieve an improved method of detecting objects in a digital image.

104. These technological improvements provide the advantages of increasing the detection rate of objects in digital images; and for detecting faces with redeye defects, the detection rate is increased over the prior art method by increasing the correct detection of face regions in input digital images through the use of multiple segmentation maps.

105. The novel use and arrangement of the specific combinations and steps recited in at least claim 3 of the '461 Patent were not well-understood, routine, or conventional to a person skill in the relevant field at the time of the inventions. In particular, the order of steps in at least at least claim 3 of the '461 Patent was not well-understood, routine, or conventional to a person skill in the relevant field at the time of the inventions. Similarly, the combination of the steps of at least claim 3 of the '461 Patent, particularly the step of detecting objects using pattern matching in the first segmentation map (which was generated according to a non-object specific criterion) and a second segmentation map (which was generated

according to an object specific criterion) respectively and merging the detected objects, was not well-understood, routine, or conventional to a person skilled in the relevant field at the time of the inventions.

COUNT 1
INFRINGEMENT OF U.S. PATENT NO. 8,665,345

106. MPV realleges and incorporates by reference the allegations set forth above as if restated verbatim here.

107. MPV is the owner, by assignment, of U.S. Patent No. 8,665,345 (the “’345 Patent”) (Exhibit A). The ’345 Patent was issued by the United States Patent and Trademark Office on March 4, 2014. *See* Exhibit A.

108. As the owner of the ’345 Patent, MPV holds all substantial rights in and under the ’345 Patent, including the right to grant licenses, exclude others, and to enforce, sue, and recover damages for past and future infringement.

109. The ’345 Patent is valid, enforceable and was duly issued in full compliance with Title 35 of the United States Code.

110. MPV alleges that Alarm.com has infringed, and continues to infringe, the ’345 Patent.

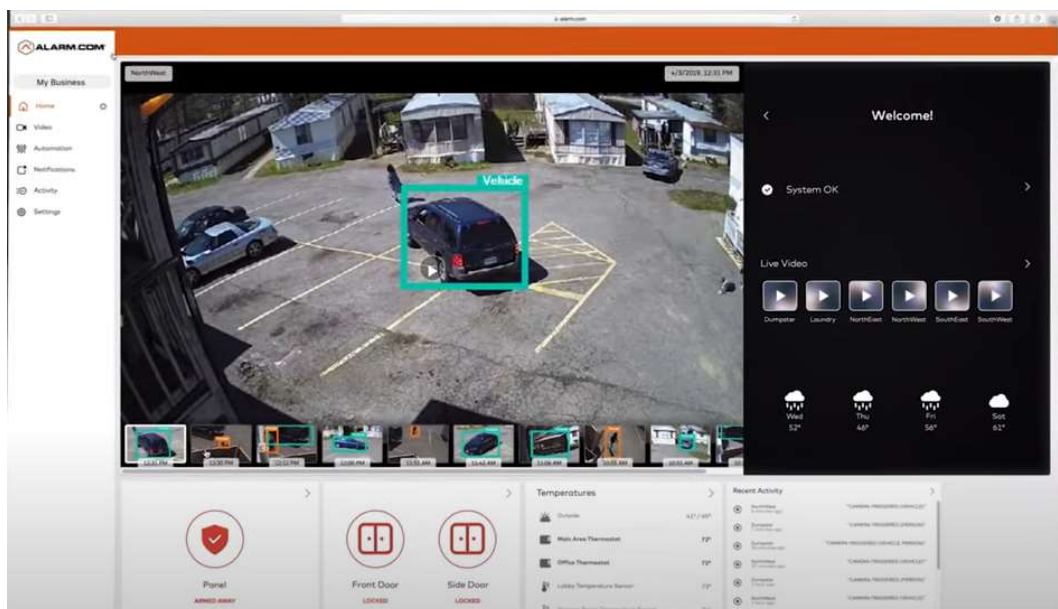
111. Alarm.com makes, uses, offers to sell, sells, and/or imports products and services Alarm.com video services (e.g., Pro Video, Video Analytics, Premium Video), Alarm.com Residential Interactive Services, Commercial Interactive Services, Video Expansion Service, including video monitoring

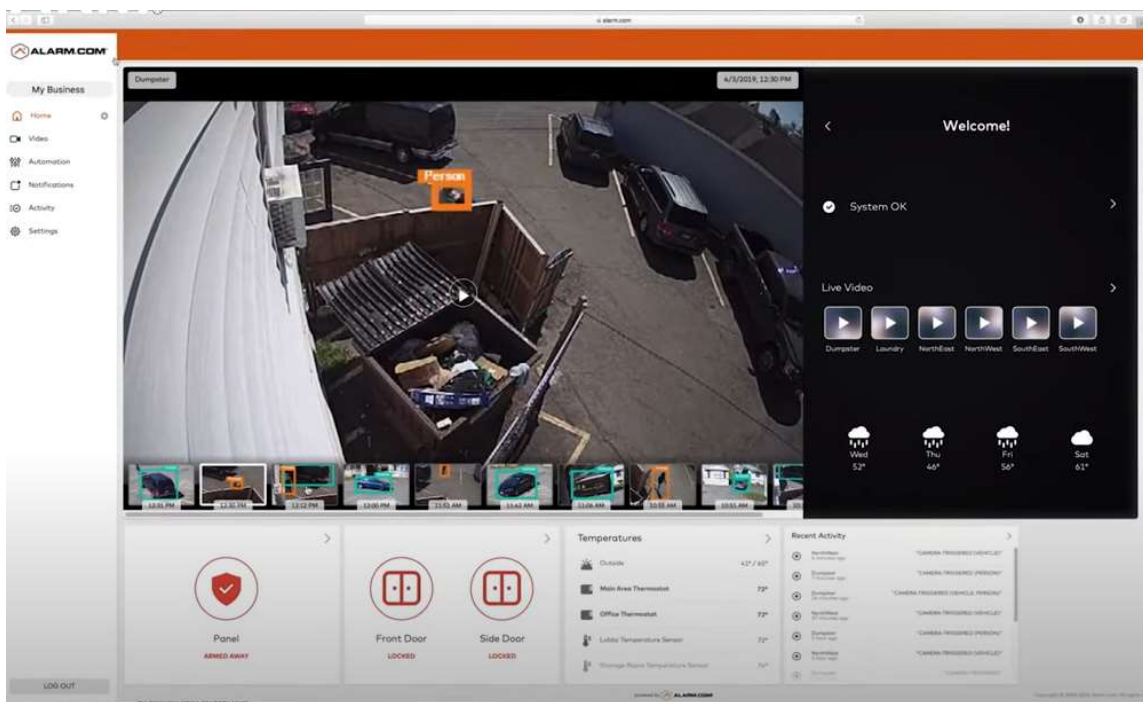
services and products accessible on the Alarm.com app, website, and dashboard and all other similar products (“Alarm.com Accused Products”) that infringe the ’345 Patent.

112. Alarm.com has directly infringed at least claims 16, 17, and 18 of the ’345 Patent by using (including its own testing), making, selling, offering for sale, licensing, and/or importing into the United States without authority the Alarm.com Accused Products.

113. Without limitation, sale, importation and/or use of the Alarm.com Accused Products has comprised the steps noted below.

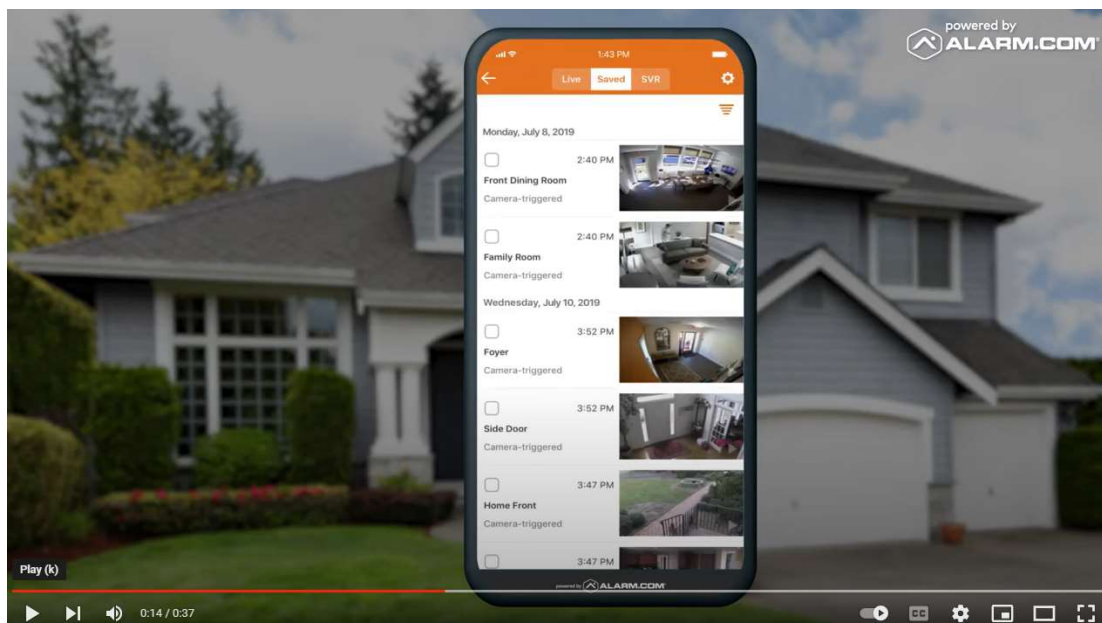
114. The Alarm.com Accused Products include playback which can be accessed on the Alarm.com mobile app, website, and on the Enterprise Dashboard. The Alarm.com Accused Products receive a video sequence including a time sequence of image frames.





<https://www.youtube.com/watch?v=OUvwFifMIL0>

115. Events are sorted from most recent to oldest and include time sequence of image frames.



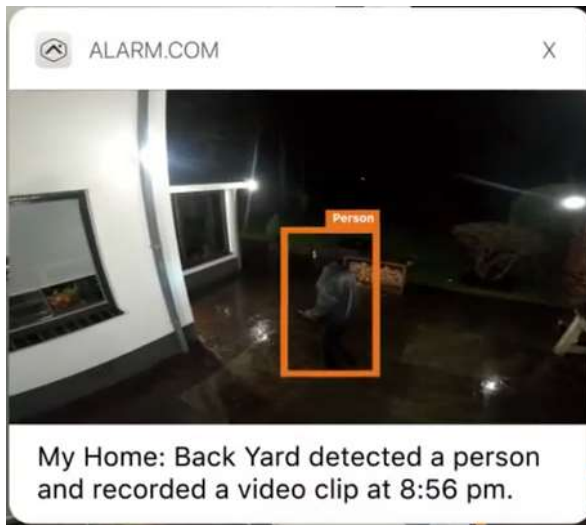
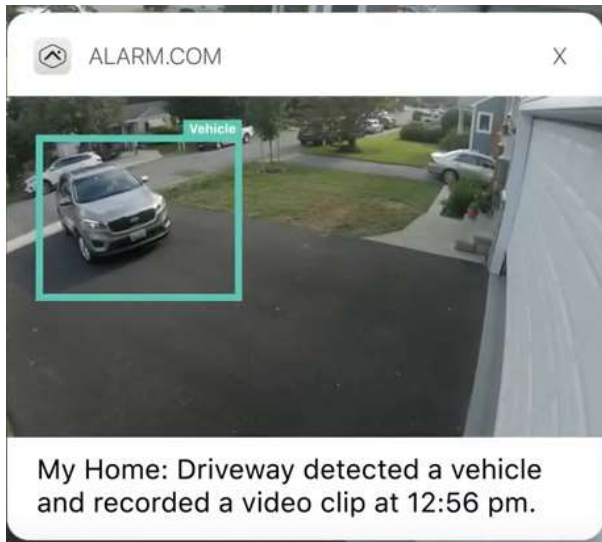
<https://www.youtube.com/watch?v=IYQh8OaAp1E>

116. Alarm.com Accused Products stores a representation of the event recordings on Alarm.com video storage servers.



<https://home.alarm.com/video-camera-monitoring/>

117. Alarm.com Accused Products specify motion detection data in the video analytics software (i.e., “reference data”) separate from a reference in the received video, wherein the data indicates a detected person (i.e., “feature of interest”).

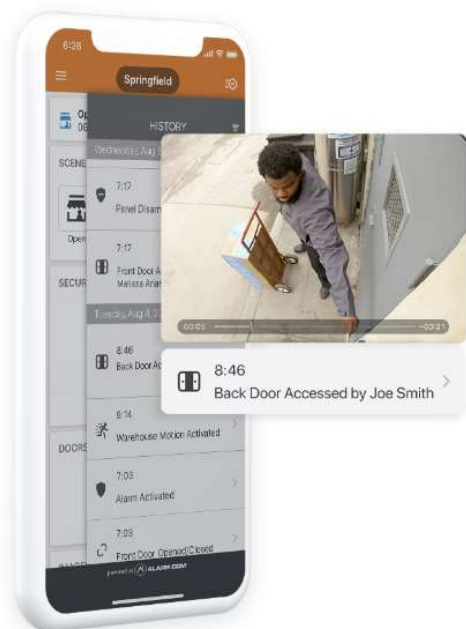


<https://www.youtube.com/watch?v=b12sdeX48P0;>

<https://www.youtube.com/watch?v=egQUPxDax4o>



<https://investors.alarm.com/news-releases/press-release-details/2018/Alarmcom-Launches-Video-Analytics/default.aspx>



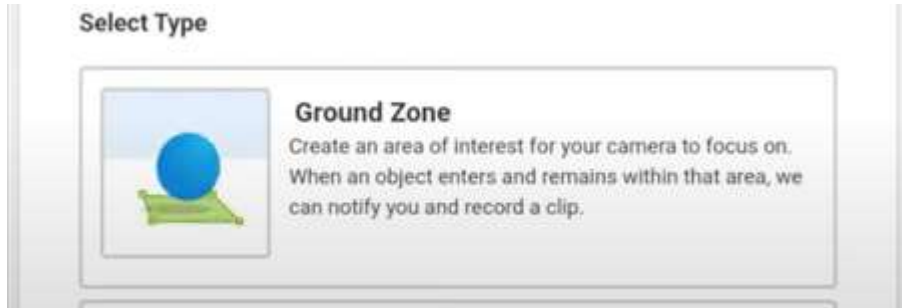
Find video that matters

Instead of manually searching through hours of footage, search for important events. Then, jump straight to corresponding footage on your 24/7 video timeline.

<https://alarm.com/business-security-camera>

118. The reference data includes information specifying that the object

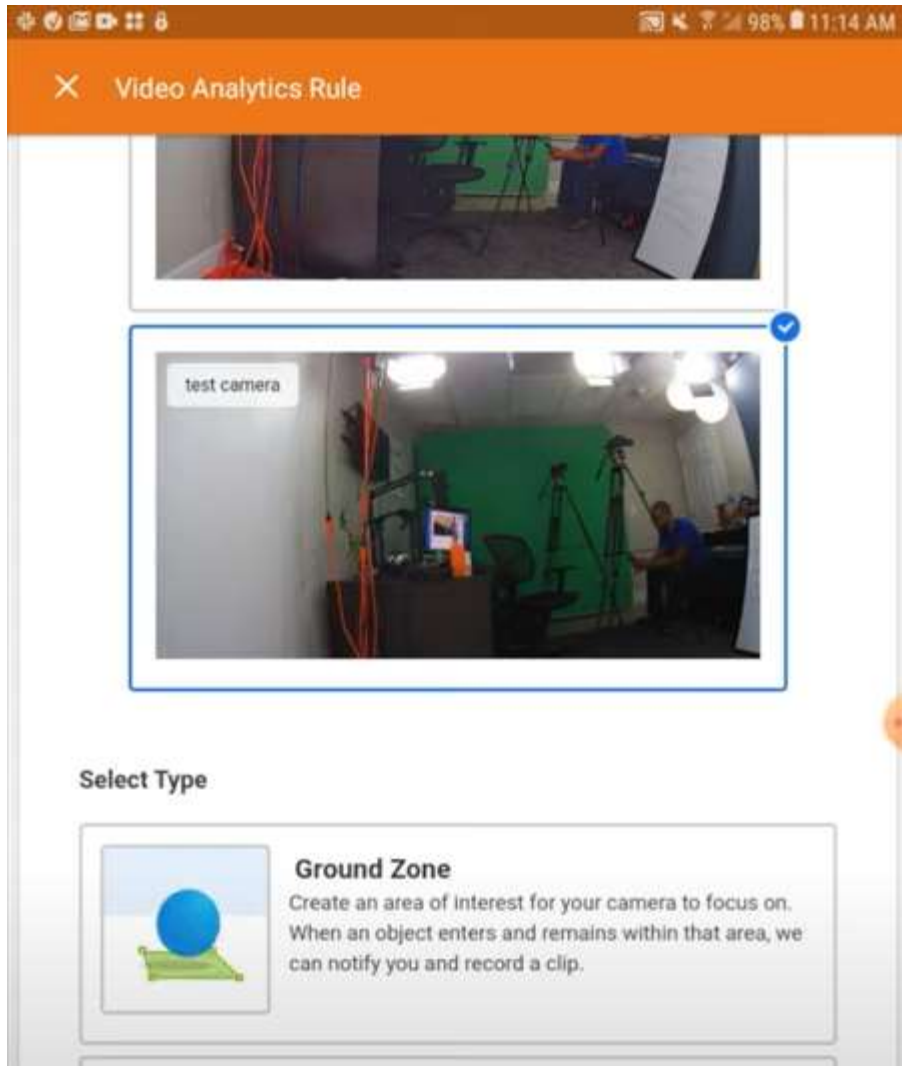
detection must occur inside of a Ground Zone (i.e., “desired characteristic of the image frames”).



<https://www.youtube.com/watch?v=-yljzf2mJzg>.

119. Alarm.com advertises that its subscribers can selectively control and assign virtual zones and multi-directional ‘tripwires’ so they can monitor for highly specific activity. <https://investors.alarm.com/news-releases/press-release-details/2018/Alarmcom-Launches-Video-Analytics/default.aspx>.

120. The Alarm.com platform (i.e., “data processor”) automatically analyzes the captured video images using human, animal, or vehicle detection algorithm (i.e., “feature recognition algorithm”) to identify those live video frames (i.e., a “subset of the image frames”) that contain a person, animal, or vehicle detected inside of the configured Ground Zone. The Alarm.com Accused Products use a processor to automatically analyze the live video images using a feature recognition algorithm to identify those video frames (i.e., “a subset of image frames”) that contain a person and have the desired object placement and sensitivity.



<https://www.youtube.com/watch?v=-yljzf2mJzg>.



Alarm.com Launches Video Analytics

October 30, 2018

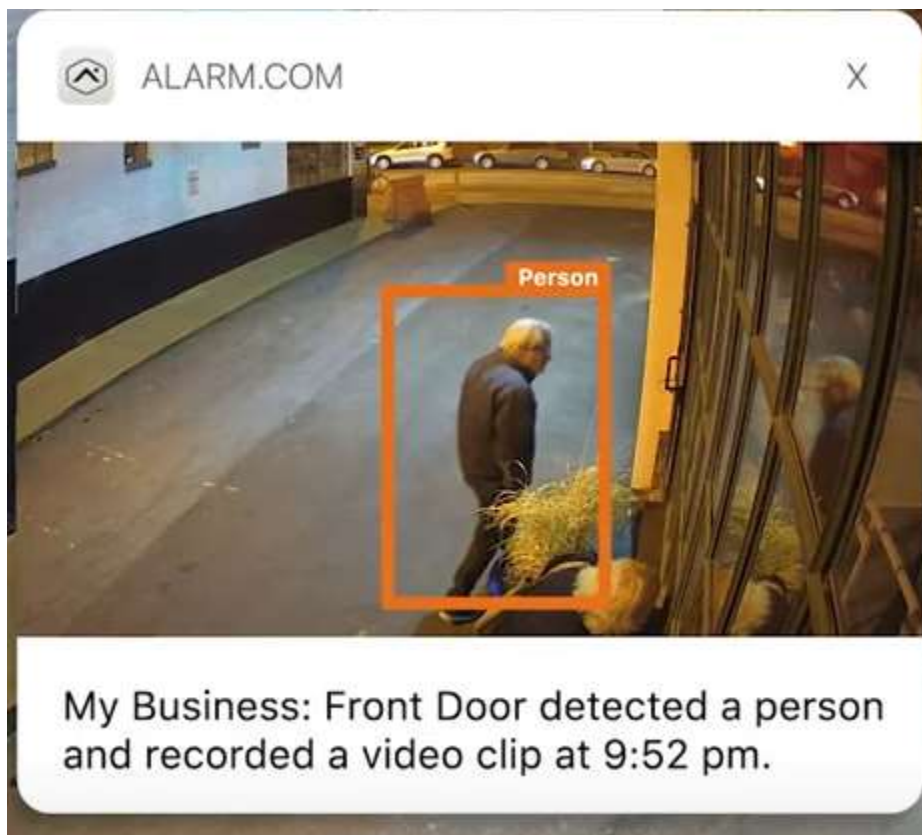
Artificial intelligence and computer vision technology power new video analytics service

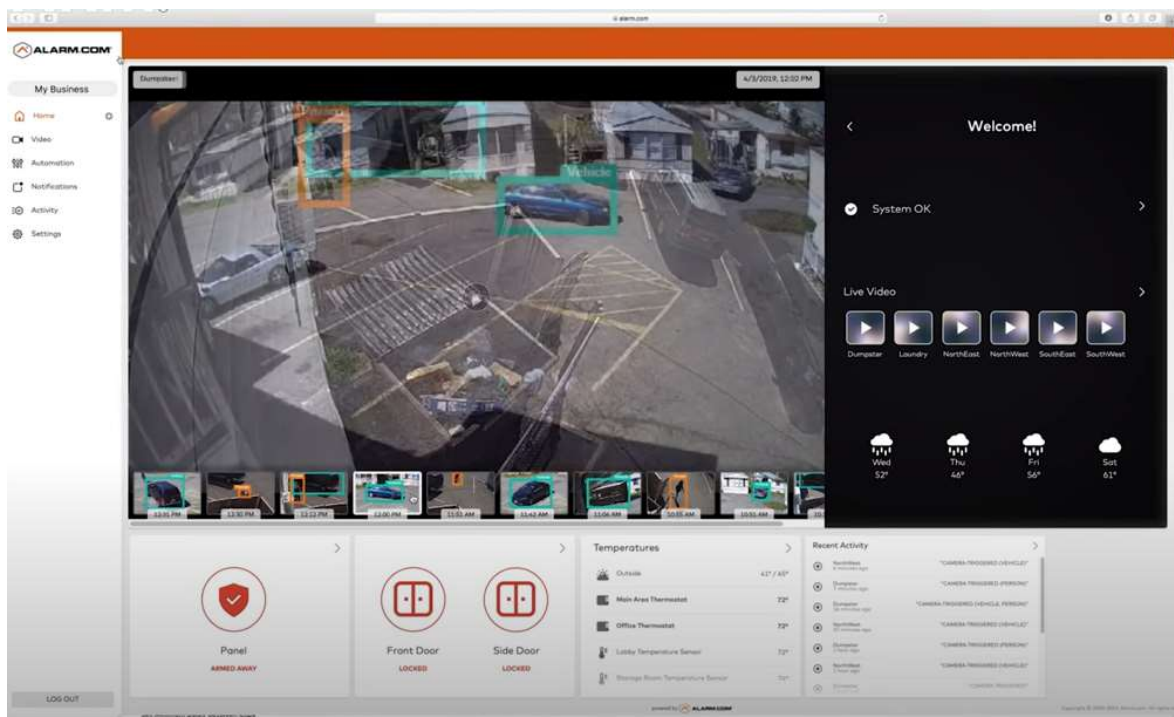
TYSONS, Va., Oct. 30, 2018 (GLOBE NEWSWIRE) -- Alarm.com (Nasdaq: ALRM), the leading platform for the intelligently connected property, announces a newly deployed artificial intelligence (AI) architecture and video analytics service. The Alarm.com platform can now monitor video streams in real-time and alert property owners about important events, while ignoring routine movement. The new service is available now for residential and business subscribers.

Alarm.com's video analytics engine is optimized to address a wide variety of smart security applications with cost-effective video cameras on the edge. Alarm.com's computer vision research team trained the AI engine with millions of frames of video donated from field-deployed cameras, and extensive feedback from service provider partners and beta program participants.

<https://investors.alarm.com/news-releases/press-release-details/2018/Alarmcom-Launches-Video-Analytics/default.aspx>.

121. Alarm.com forms recordings (i.e., “a video summary including fewer than all of the image frames”), wherein the recordings include a person, animal, or vehicle detected inside of the set area.





<https://www.youtube.com/watch?v=OUvwFifMIL0>.

122. Alarm.com stores the recordings along with relevant data (i.e., “a representation of the video summary”) in a searchable location on the Alarm.com video storage servers.



<https://home.alarm.com/video-camera-monitoring/>.

123. Alarm.com has used and tested the Alarm.com Accused Products in the United States.

124. Alarm.com thus has infringed and continues to infringe the '345 Patent.

125. Alarm.com's activities were without authority of license under the '345 Patent.

126. Alarm.com's users, customers, agents and/or other third parties (collectively, "third-party infringers") infringed and continue to infringe the asserted claims including under 35 U.S.C. § 271(a) by using the Alarm.com Accused Products according to their normal and intended use.

127. Alarm.com has, since at least as early as October 25, 2021, known or been willfully blind to the fact that the third-party infringers' use of the Alarm.com Accused Products directly infringes the '345 Patent.

128. Alarm.com's knowledge of the '345 Patent, which covers operating the Alarm.com Accused Products in their intended manner such that all limitations of the asserted claims of the '345 Patent are met, extends to its knowledge that the third-party infringers' use of the Alarm.com Accused Products directly infringes the '345 Patent, or, at the very least, rendered Alarm.com willfully blind to such infringement.

129. With knowledge of or willful blindness to the fact that the third-party

infringers' use of the Alarm.com Accused Products in their intended manner such that all limitations of the asserted claims of the '345 Patent are met directly infringes the '345 Patent, Alarm.com has actively encouraged the third-party infringers to directly infringe the '345 Patent by making, using, testing, selling, offering for sale, importing and/or licensing the accused products by, for example: marketing Alarm.com's playback capabilities to the third-party infringers; supporting and managing the third-party infringers' use of the Alarm.com playback functions; and providing technical assistance to the third-party infringers during their continued use of the Alarm.com Accused Products such as by, for example, publishing instructional information on the Alarm.com websites directing and encouraging third-party infringers how to make and use the playback features of the Alarm.com Accused Products.

130. Alarm.com induces the third-party infringers to infringe the asserted claims of the '345 Patent by directing or encouraging them to operate the Alarm.com Accused Products which satisfy all limitations of the asserted claims of the '345 Patent. For example, Alarm.com advertises and promotes the playback features of the Alarm.com Accused Products and encourages the third-party infringers to operate them in an infringing manner. Alarm.com further provides technical assistance directing and instructing third parties how to operate the Alarm.com Accused Products by, for example, publishing instructional materials,

videos, resources hub, how-to guides, troubleshooting, and user guides.

131. In response, the third-party infringers acquire and operate the Alarm.com Accused Products in an infringing manner.

132. Alarm.com specifically intends to induce, and did induce, the third-party infringers to infringe the asserted claims of the '345 Patent, and Alarm.com knew of or was willfully blind to such infringement. Alarm.com advised, encouraged, and/or aided the third-party infringers to engage in direct infringement, including through its encouragement, advice, and assistance to the third-party infringers to use the playback features of the Alarm.com Accused Products. Having known or been willfully blind to the fact that the third-party infringers' use of the Alarm.com Accused Products in their intended manner such that all limitations of asserted claims of the '345 Patent were met directly infringed the '345 Patent, Alarm.com, upon information and belief, actively encouraged and induced the third-party infringers to directly infringe the '345 Patent by making, using, testing, selling, offering for sale, importing and/or licensing said Alarm.com Accused Products, and by, for example: marketing the Alarm.com Accused Products to the third-party infringers; supporting and managing the third-party infringers' use of the Alarm.com Accused Products; and providing technical assistance to the third-party infringers during their continued use of the Alarm.com Accused Products by, for example, publishing the following instructional

information directing third-party infringers how to make and use the Alarm.com

Accused Products to infringe the asserted claims of the '345 Patent:

- <https://alarm.com/resources/video-analytics-smart-lights>;
- <https://alarm.com/resources>;
- <https://alarm.com/resources/business>;
- <https://alarm.com/resources/home>;
- <https://alarm.com/resources/video-surveillance-a-business-priority>;
- <https://alarm.com/resources/video-analytics>;
- <https://alarm.com/help>;
- <https://answers.alarm.com/>;
- https://answers.alarm.com/Customer/Website_and_App/Video;
- https://answers.alarm.com/Customer/Website_and_App/Video/Video_Settings/How_can_a_camera_be_reconnected_to_a_Wi-Fi_network_if_the_router_network_equipment_or_wireless_settings_change;
- https://answers.alarm.com/Customer/Website_and_App/Video/Recording_Video/Create_or_edit_a_Video_Motion_Detection_recording_rule;
- [https://answers.alarm.com/Customer/Website_and_App/Video/Video_Settings/How_should_I_configure_Video_Motion_Detection_\(VMD\)_settings_for_a_video_device](https://answers.alarm.com/Customer/Website_and_App/Video/Video_Settings/How_should_I_configure_Video_Motion_Detection_(VMD)_settings_for_a_video_device);
- [https://answers.alarm.com/Customer/Website_and_App/Video/Video_Settings/How_should_I_configure_Video_Motion_Detection_\(VMD\)_settings_for_a_video_device](https://answers.alarm.com/Customer/Website_and_App/Video/Video_Settings/How_should_I_configure_Video_Motion_Detection_(VMD)_settings_for_a_video_device);

[tings/Configure_a_Video_Analytics_rule](#); and

- www.alarm.com/com/login help documentation, among others.

133. Based upon the foregoing facts, among other things, Alarm.com has induced and continues to induce infringement of the asserted claims of the '345 Patent under 35 U.S.C. § 271(b).

134. Alarm.com has sold, provided and/or licensed to the third-party infringers and continues to sell, provide and/or license the Alarm.com Accused Products that are especially made and adapted—and specifically intended by Alarm.com—to be used as components and material parts of the inventions covered by the '345 Patent. For example, the Alarm.com Accused Products include playback and cataloging features identified above which the third-party infringers used in a manner such that all limitations of the asserted claims are met, and without which the third-party infringers would have been unable to use and avail themselves of the intended functionality of the accused products.

135. Alarm.com also knew that the accused products are operated in a manner that practices each asserted claim of the '345 Patent.

136. The playback features are specially made and adapted to infringe the asserted claims of the '345 Patent.

137. The playback features are not a staple article or commodity of commerce, and, because the functionality was designed to work with the

Alarm.com Accused Products solely in a manner that is covered by the '345 Patent, it has no substantial non-infringing use. At least by October 25, 2021, based upon the foregoing facts, Alarm.com knew of or was willfully blind to the fact that such functionality was especially made and adapted for—and was in fact used in—the accused products in a manner that is covered by the '345 Patent.

138. Based upon the foregoing facts, among other things, Alarm.com has contributorily infringed and continues to contributorily infringe the asserted claims of the '345 Patent under 35 U.S.C. § 271(c).

139. Upon information and belief, Alarm.com's acts of infringement of the '345 Patent continue since notice and since this complaint was filed and are, therefore, carried out with knowledge of the asserted claims of the '345 Patent and how the Alarm.com Accused Products infringe them. Rather than take a license to the '345 Patent, Alarm.com's ongoing infringing conduct reflects a business decision to “efficiently infringe” the asserted claims and in doing so constitutes willful infringement under the standard of *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923 (2016).

140. Alarm.com's acts of direct and indirect infringement have caused and continue to cause damage to MPV for which MPV is entitled to recover damages sustained as a result of Alarm.com's infringing acts in an amount subject to proof at trial, which, by law, cannot be less than a reasonable royalty, together with

interest and costs as fixed by this Court, pursuant to 35 U.S.C. § 284.

COUNT 2
INFRINGEMENT OF U.S. PATENT NO. 7,730,036

141. MPV realleges and incorporates by reference the allegations set forth above as if restated verbatim here.

142. MPV is the owner, by assignment, of U.S. Patent No. 7,730,036 (Exhibit B).

143. As the owner of the '036 Patent, MPV holds all substantial rights in and under the '036 Patent, including the right to grant licenses, exclude others, and to enforce, sue, and recover damages for past and future infringement.

144. The '036 Patent is valid, enforceable and was duly issued in full compliance with Title 35 of the United States Code after a full and fair examination.

145. MPV alleges that Alarm.com has infringed, and continues to infringe, the '036 Patent.

146. The '036 Patent was issued by the United States Patent and Trademark Office on June 1, 2010. *See* Exhibit B.

147. The '036 Patent generally relates to the field of digital image processing, and more particularly, to event-based organization of digital images, video, and audio files.

148. Alarm.com has directly infringed at least claims 1, 2 and 3 of the '036

Patent by using (including its own testing), making, selling, offering for sale, licensing, and/or importing into the United States without authority Alarm.com products and services including video services (e.g. Pro Video, Video Analytics, Premium Video), Residential Interactive Services, Commercial Interactive Services, Video Expansion Service, video monitoring services and products and all other similar products and services (“Alarm.com Accused Products”) that infringe the ’036 Patent. The Alarm.com Accused Products are accessible on the Alarm.com app, website, and dashboard.

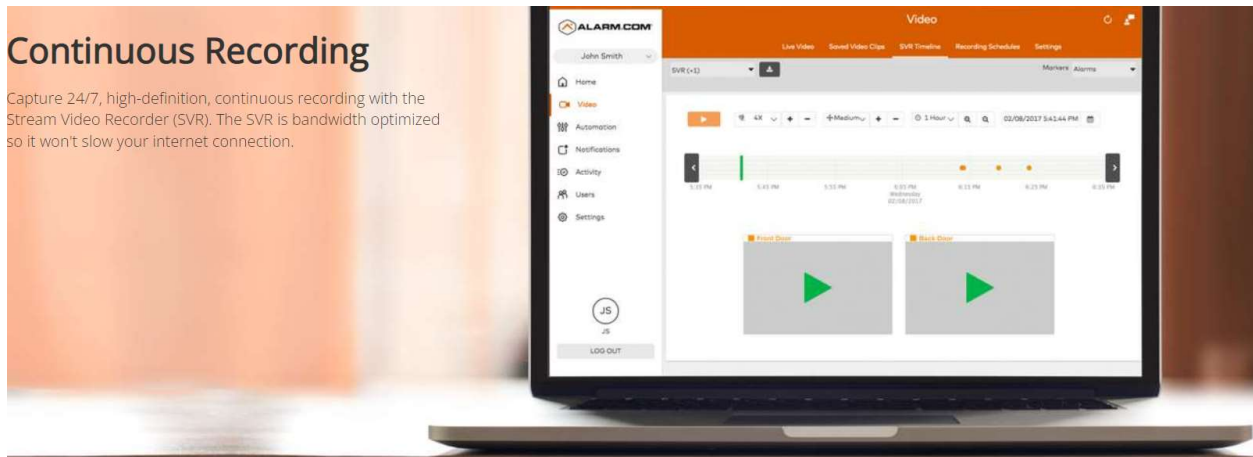
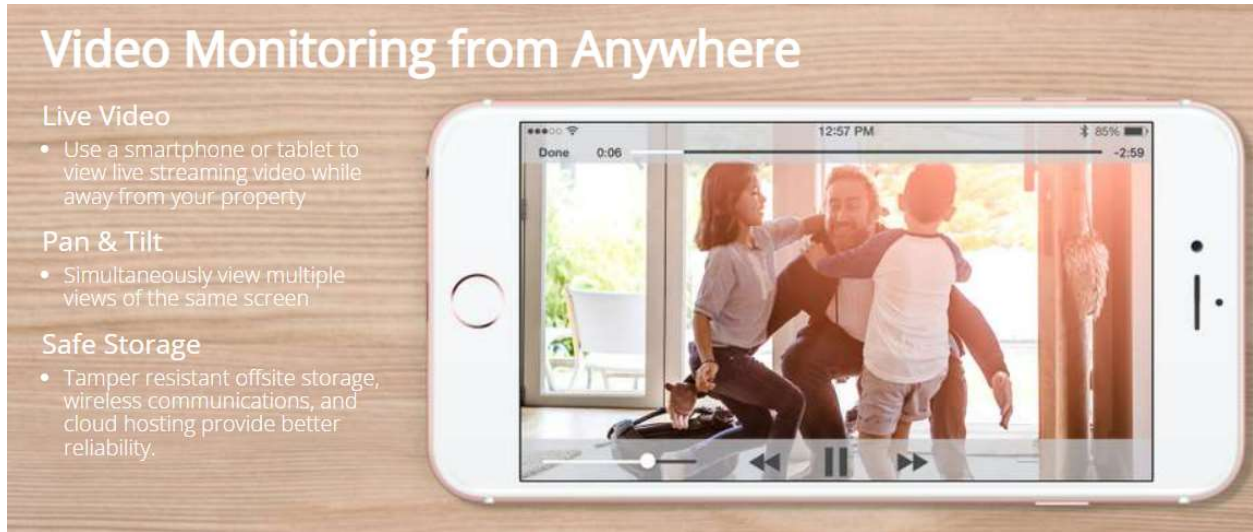
149. Without limitation, sale, importation and/or use of the Alarm.com Accused Products has comprised the steps noted below.

150. Claim 1 of the ’036 Patent covers a method implemented at least in part by a computer system, the method for organizing digital content records and comprising the steps of: receiving a plurality of digital content records, at least some of said digital content records having associated metadata identifying at least a time-date of capture, a location of capture, or a time-date of capture and a location of capture, wherein at least one of the digital content records has associated metadata identifying a time-date of capture, and at least one of the digital content records has associated metadata identifying a location of capture; defining an event at least by identifying a set of event boundaries associated at least with a span of time and a geographic area; identifying digital content records

(“event content-records”) of the plurality of digital content records to be associated with the event, at least some of the digital content records being identified as event-content records because they meet metadata conditions, wherein the metadata conditions include that the time-date-of-capture metadata and location-of-capture metadata of the corresponding digital content records identify a time-date-of-capture and a location-of-capture within the span of time and the geographic area, respectively; associating at least some of the event content-records (“associated event-content-records”) with the event; storing information identifying the association of at least some of the event content-records with the event in a computer-accessible memory system; and wherein the location-of-capture metadata identifies a network address of a network access point, wherein the geographic area event boundary is defined at least in part by a particular network address, and wherein the metadata conditions include that the network address corresponds to the particular network address.

151. The Alarm.com Accused Products use a computer system to organize digital content and records (videos) and organize them according to event rules and camera metadata information.

152. The Alarm.com Accused Products upload saved captured images to the Alarm.com video storage servers, organizing them according to rules and sensor metadata information.



<https://home.alarm.com/video-camera-monitoring/>.

153. Alarm.com receives recorded videos (i.e., “receiving a plurality of digital content records”) from Alarm.com compatible cameras. The videos recorded by the cameras have associated metadata which identify a time-date of capture and IP address, identifying the location of recorded videos (i.e. “metadata identifying a location of a capture”).

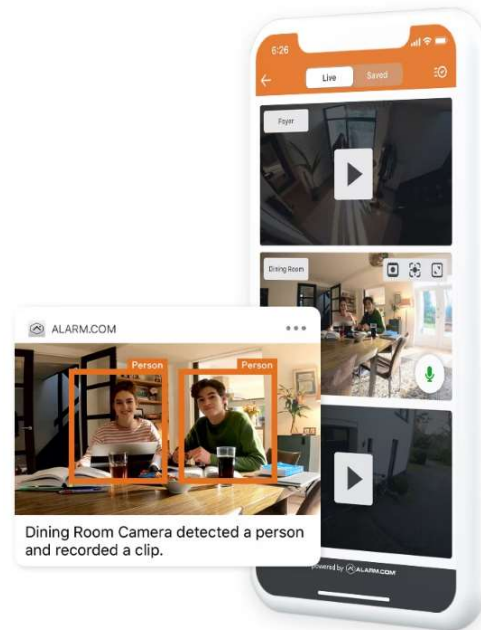
See everything that matters

Outdoors: Customize your video alerts to focus on people, vehicles, animals or specific areas of your property. Only get alerts about what matters most to you.

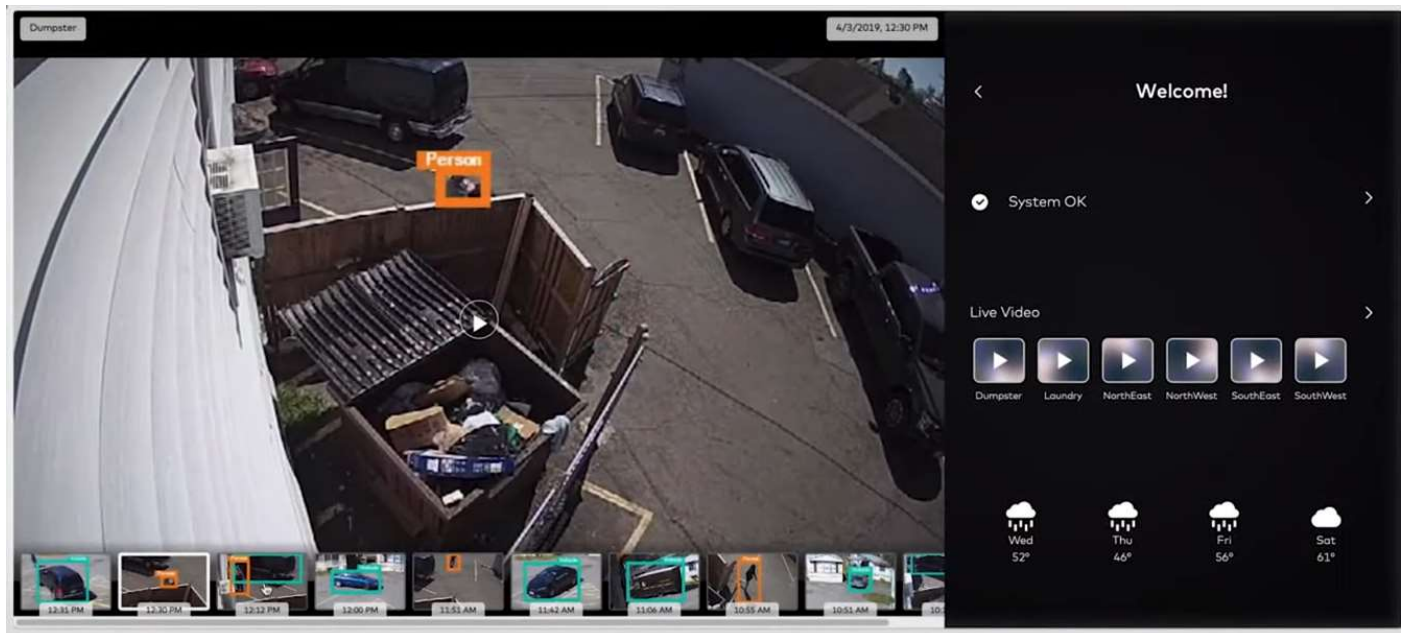
Indoors: Get daily video clips of your family arriving home, or check in with a quick call through your camera.

Front door: See and talk to visitors from anywhere. Tap your app once to unlock the door and give access.

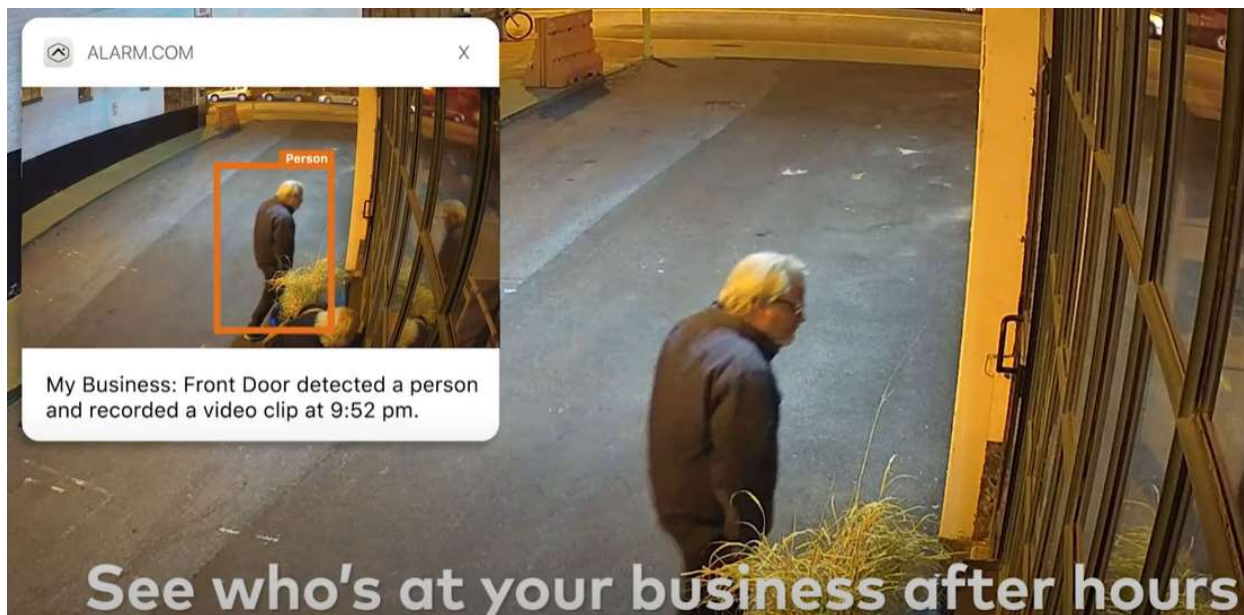
LET'S GET STARTED →



<https://alarm.com/home-security-video>.



<https://www.youtube.com/watch?v=OUvwFifMIL0>.



<https://www.youtube.com/watch?v=OUvwFifMIL0>.



<https://www.youtube.com/watch?v=-9RD3EdJw84>.

154. The videos recorded by Alarm.com compatible cameras include associated metadata which describe a time-date and/or identifying the location of

recorded videos (i.e., “metadata identifying a location of a capture”) associated with the IP address of the specific camera in use.



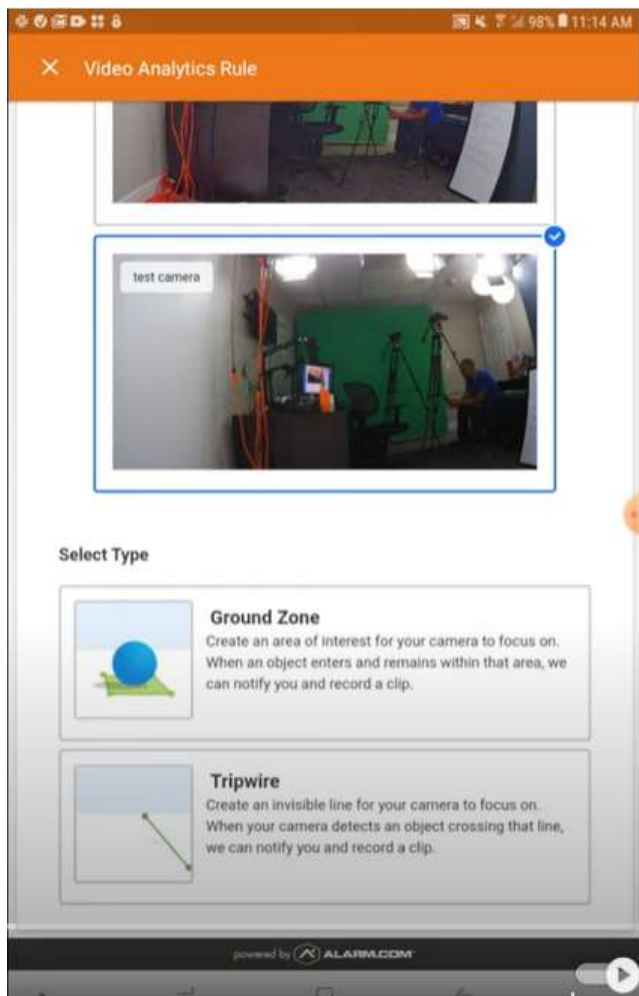
<https://s24.q4cdn.com/652723797/files/videos/Smarter-Home-Security-Video.mp4>.

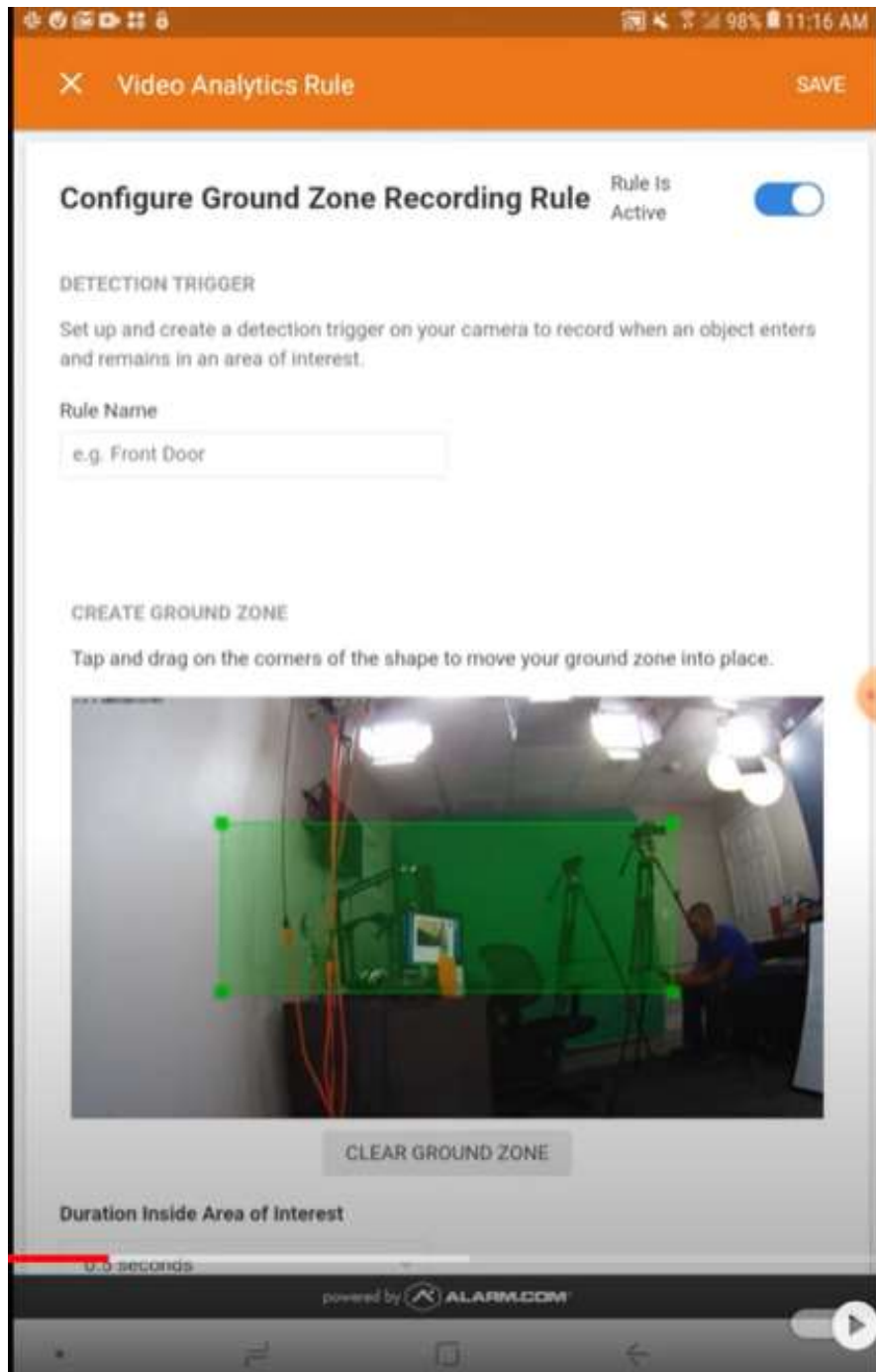
This method applies to all AP Mode-enabled Alarm.com cameras. For specific camera specifications, find the camera's data sheet in [Video Devices](#).

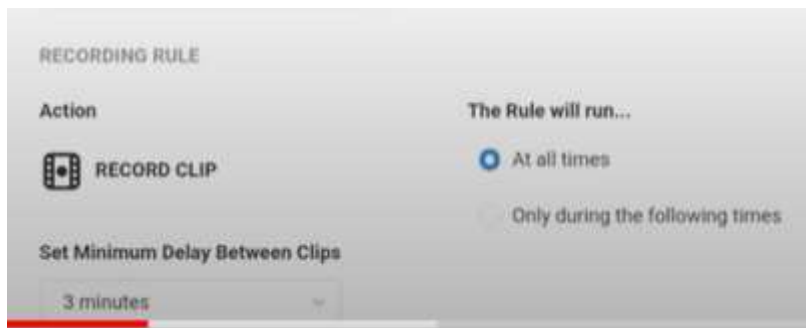
1. Press and hold the **WPS** button on the back of the camera for five to seven seconds.
 - o The camera first flashes blue before flashing white.
 - o Once the camera's status LED flashes white, immediately release the button.
2. Using a computer, smartphone, or tablet, connect to the Wi-Fi network named *ALARM* (##:##:##).
 - o The numbers in parentheses are the last six digits of the camera's MAC address.
3. Using a web browser on the device used in step 2, enter the camera's access point web address (i.e., <http://V721install>, <http://521irinstall>, etc.).
4. Press **Enter** to open the web page.
 - o If this does not work, verify that the device is still connected to the *ALARM* network.
 - o If the camera's access point URL is not working, enter the IP address of the camera **192.168.1.1** in the web browser and press **Enter**.
5. Follow the on-screen instructions to connect the camera to the customer's wireless network.
6. Click **Scan for wireless networks**.
7. Click the name of the customer's Wi-Fi network.
8. In the *Security Key* field, enter the customer's Wi-Fi password.
9. Click **OK** in the pop-up window that appears asking to refer to the website.
10. Once the camera's LED is solid green, try to view live video on the Customer Website or app.
 - o If the camera's LED does not turn solid green, reboot the camera retry this procedure.

<https://support.reedsecurity.com/portal/en/kb/articles/alar#:~:text=If%20the%20camera's%20access%20point,web%20browser%20and%20press%20Enter.>

155. Alarm.com defines a motion trigger event by identifying a Ground Zone or Tripwire (i.e., “a set of event boundaries”) associated with a capture time frame and a particular camera (i.e., “span of time and a geographic area”).



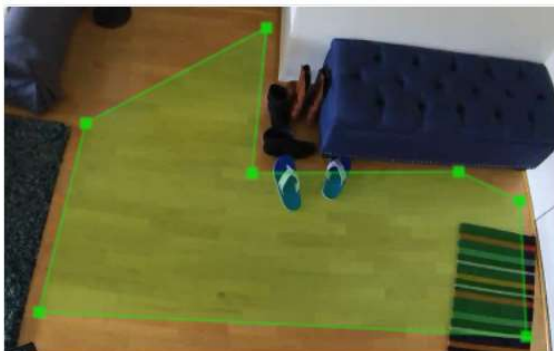




<https://www.youtube.com/watch?v=-yljzf2mJzg>.

Configure Rule - Ground Zone

1. In the *Rule Name* field, enter a name for the recording rule.
2. Click and drag the corners of the shape to cover only the ground where the target's feet will be. To clear the current area of interest and restart, click **Clear ground zone** to create a new area of interest with up to 28 points.
 - Click and hold inside the shape to move the shape itself.



3. Using the *Duration Inside Area of Interest* dropdown menu, select the desired time an object needs to stay inside the Ground Zone to trigger a recording.

https://answers.alarm.com/Customer/Website_and_App/Video/Video_Settings/Configure_a_Video_Analytics_rule.

156. Alarm.com identifies recorded videos of a motion triggered event via the specified ground zone or tripwire (i.e., "identifying digital content records...associated with the event"), wherein the metadata conditions include a date-time and particular location of recorded videos. Alarm.com associates the


recorded triggered linger event with the video. The Alarm.com Accused Products associate event-content records (video) with a particular event when the contents of the video meet user specified event conditions (e.g. associates the recorded triggered motion event with the video). Alarm.com identifies video based on time and location. Users can filter videos based on associated metadata.

157. The Alarm.com Accused Products store recorded motion event videos identified by the association of motion detected in the specified Ground Zone or Tripwire with the video saved in the memory on Alarm.com servers, accessible from internet-enabled devices.

Find a specific clip

To filter clips using the Alarm.com app:

Note: If you are having trouble finding the clip, use as narrow date range as possible to ensure it appears.

1. Log into the Alarm.com app.
2. Tap **Video**.
3. Tap **Saved**.
4. Tap .
5. Choose any desired filters.
6. Tap **Apply** to filter the results. The filter preferences will be removed after logging out or closing the Alarm.com app.

To filter clips using the Alarm.com customer website:

Note: The Alarm.com customer website returns a maximum of 500 clips per search. If you are having trouble finding the clip, use a narrow date range or other filters to narrow down the search.

1. Log into the Alarm.com customer website.
2. Click **Video**.
3. Click **Saved Video Clips**.
4. Click **Filter**.
5. Choose any desired filters.
6. Click **Apply** to filter the results. Your filter preferences will be saved for future visits to the page.

https://answers.alarm.com/Customer/Website_and_App/Video/Saved_Video/View_saved_video.

| Camera | Clip Description | File Size | Time of Recording |
|---|------------------|-----------|----------------------|
| <input checked="" type="checkbox"/> SD Camera | Camera-triggered | 318 KB | 10/7/2014 5:05:03 pm |
| <input type="checkbox"/> SD Camera | Camera-triggered | 370 KB | 10/7/2014 4:59:13 pm |
| <input type="checkbox"/> SD Camera | Camera-triggered | 331 KB | 10/7/2014 4:50:35 pm |
| <input type="checkbox"/> SD Camera | Camera-triggered | 319 KB | 10/7/2014 4:49:45 pm |
| <input type="checkbox"/> SD Camera | Camera-triggered | 289 KB | 10/7/2014 4:47:49 pm |
| <input type="checkbox"/> SD Camera | Camera-triggered | 344 KB | 10/7/2014 4:44:23 pm |
| <input type="checkbox"/> SD Camera | Camera-triggered | 304 KB | 10/7/2014 4:43:05 pm |
| <input type="checkbox"/> SD Camera | Camera-triggered | 312 KB | 10/7/2014 4:41:34 pm |
| <input type="checkbox"/> SD Camera | Camera-triggered | 298 KB | 10/7/2014 4:41:04 pm |
| <input type="checkbox"/> SD Camera | Camera-triggered | 312 KB | 10/7/2014 4:37:26 pm |

<https://www.youtube.com/watch?v=JhGDg6RPrFY>.

158. Alarm.com metadata identifies the IP address of the camera (i.e. “network address of a network access point”).

This method applies to all AP Mode-enabled Alarm.com cameras. For specific camera specifications, find the camera's data sheet in [Video Devices](#).

1. Press and hold the **WPS** button on the back of the camera for five to seven seconds.
 - o The camera first flashes blue before flashing white.
 - o Once the camera's status LED flashes white, immediately release the button.
2. Using a computer, smartphone, or tablet, connect to the Wi-Fi network named *ALARM (###:###:###)*.
 - o The numbers in parentheses are the last six digits of the camera's MAC address.
3. Using a web browser on the device used in step 2, enter the camera's access point web address (i.e., <http://V721install>, <http://521irinstall>, etc.).
4. Press **Enter** to open the web page.
 - o If this does not work, verify that the device is still connected to the *ALARM* network.
 - o If the camera's access point URL is not working, enter the IP address of the camera **192.168.1.1** in the web browser and press **Enter**.
5. Follow the on-screen instructions to connect the camera to the customer's wireless network.
6. Click **Scan for wireless networks**.
7. Click the name of the customer's Wi-Fi network.
8. In the *Security Key* field, enter the customer's Wi-Fi password.
9. Click **Ok** in the pop-up window that appears asking to refer to the website.
10. Once the camera's LED is solid green, try to view live video on the Customer Website or app.
 - o If the camera's LED does not turn solid green, reboot the camera retry this procedure.

<https://support.reedsecurity.com/portal/en/kb/articles/alar#:~:text=If%20the%20ca>

[mera's%20access%20point,web%20browser%20and%20press%20Enter.](#)

159. Alarm.com's detection map associates user defined event rules with specified cameras using their IP addresses. Unique IP addresses, which specify specific cameras and camera locations, are associated with user specified rules.



https://zionssecurity.com/wp-content/uploads/2018/12/View_saved_clips.jpg.

160. Alarm.com describes its products and its video recording playback features on its website at <https://www.alarm.com>; <https://www.answers.alarm.com>; https://answers.alarm.com/Customer/Website_and_App/Video/Recording_Video/Create_or_edit_a_Video_Motion_Detection_recording_rule; [https://answers.alarm.com/Customer/Website_and_App/Video/Video_Settings/How_should_I_configure_Video_Motion_Detection_\(VMD\)_settings_for_a_video_device](https://answers.alarm.com/Customer/Website_and_App/Video/Video_Settings/How_should_I_configure_Video_Motion_Detection_(VMD)_settings_for_a_video_device); and https://answers.alarm.com/Customer/Website_and_App/Video/Video_Settings/Configure_a_Video_Analytics_rule (“Alarm.com Product Overview”).

161. Alarm.com published the Alarm.com Product Overview that

accurately describes the operation of the Alarm.com Accused Products.

162. Alarm.com published the Alarm.com Product Overview that accurately describes the operation of the playback features of the Alarm.com Accused Products.

163. Alarm.com has used playback features of the Alarm.com Accused Products.

164. Alarm.com has tested the playback features of the Alarm.com Accused Products.

165. The Alarm.com Accused Products satisfy each and every element of each asserted claim of the '036 Patent either literally or under the doctrine of equivalents.

166. Alarm.com thus infringed at least claims 1, 2 and 3 of the '036 Patent by using the Accused Products (including in its own testing) in the United States.

167. Alarm.com's activities were without authority of license under the '036 Patent.

168. Alarm.com's users, customers, agents and/or other third parties (collectively, "third-party infringers") infringed and continue to infringe, including under 35 U.S.C. § 271(a), at least claims 1, 2 and 3 of the '036 Patent by using the Alarm.com Accused Products.

169. Alarm.com has, since at least as early as notice on October 25, 2021

and the filing of the complaint, known or been willfully blind to the fact that the third-party infringers' use of Alarm.com Accused Products directly infringed the '036 Patent.

170. Alarm.com's knowledge of the '036 Patent, which covered operating the Alarm.com Accused Products in their intended manner such that all limitations of at least claims 1, 2 and 3 of the '036 Patent were met, made it known to Alarm.com that the third-party infringers' use of the Alarm.com Accused Products directly infringed the '036 Patent, or, at the very least, rendered Alarm.com willfully blind to such infringement.

171. Having known or been willfully blind to the fact that the third-party infringers' use of the Alarm.com Accused Products in their intended manner such that all limitations of at least claims 1, 2 and 3 of the '036 Patent were met directly infringed the '036 Patent, Alarm.com, upon information and belief, actively encouraged and induced the third-party infringers to directly infringe the '036 Patent by making, using, testing, selling, offering for sale, importing and/or licensing said Alarm.com Accused Products, and by, for example: marketing the Alarm.com Accused Products to the third-party infringers; supporting and managing the third-party infringers' use of the Alarm.com Accused Products; and providing technical assistance to the third-party infringers during their continued use of the Alarm.com Accused Products by, for example, publishing the following

instructional information directing third-party infringers how to make and use the Alarm.com Accused Products to infringe claims 1, 2 and 3 of the '036 Patent:

- <https://alarm.com/resources/video-analytics-smart-lights>;
- <https://alarm.com/resources>;
- <https://alarm.com/resources/business>;
- <https://alarm.com/resources/home>;
- <https://alarm.com/resources/video-surveillance-a-business-priority>;
- <https://alarm.com/resources/video-analytics>;
- <https://alarm.com/help>;
- <https://answers.alarm.com/>;
- https://answers.alarm.com/Customer/Website_and_App/Video;
- https://answers.alarm.com/Customer/Website_and_App/Video/Video_Settings/How_can_a_camera_be_reconnected_to_a_Wi-Fi_network_if_the_router_network_equipment_or_wireless_settings_change;
- https://answers.alarm.com/Customer/Website_and_App/Video/Recording_Video/Create_or_edit_a_Video_Motion_Detection_recording_rule;
- [https://answers.alarm.com/Customer/Website_and_App/Video/Video_Settings/How_should_I_configure_Video_Motion_Detection_\(VMD\)_settings_for_a_video_device](https://answers.alarm.com/Customer/Website_and_App/Video/Video_Settings/How_should_I_configure_Video_Motion_Detection_(VMD)_settings_for_a_video_device);
- [https://answers.alarm.com/Customer/Website_and_App/Video/Video_Settings/How_should_I_configure_Video_Motion_Detection_\(VMD\)_settings_for_a_video_device](https://answers.alarm.com/Customer/Website_and_App/Video/Video_Settings/How_should_I_configure_Video_Motion_Detection_(VMD)_settings_for_a_video_device);

[tings/Configure_a_Video_Analytics_rule](#); and

- www.alarm.com/com/login help documentation, among others.

172. In response, the third-party infringers acquired and operated the Alarm.com Accused Products such that all limitations of claims 1, 2 and 3 of the '036 Patent were practiced.

173. Alarm.com specifically intended to induce, and did induce, the third-party infringers to infringe at least claims 1, 2 and 3 of the '036 Patent, and Alarm.com knew of or was willfully blind to such infringement. Alarm.com advised, encouraged, and/or aided the third-party infringers to engage in direct infringement, including through its encouragement, advice, and assistance to the third-party infringers to use the Alarm.com Accused Products.

174. Based upon, among other things, the foregoing facts, Alarm.com induced infringement under 35 U.S.C. § 271(b) of at least claims 1, 2 and 3 of the '036 Patent.

175. Further, Alarm.com sold, provided and/or licensed to the third-party infringers Alarm.com Accused Products especially made and adapted—and specifically intended by Alarm.com—to be used as components and material parts of the inventions covered by the '036 Patent. For example, Alarm.com Accused Products were used by third-party infringers in a manner in which all limitations of at least claims 1, 2 and 3 of the '036 Patent were met, and without which the third-

party infringers would have been unable to use and avail themselves of the Alarm.com Accused Products in their intended manner.

176. Upon information and belief, Alarm.com also knew that the Alarm.com Accused Products operated in a manner that satisfied all limitations of at least claims 1, 2 and 3 of the '036 Patent.

177. The playback feature of the Alarm.com Accused Products was specially made and adapted to infringe at least claims 1, 2 and 3 of the '036 Patent. Upon information and belief, the playback feature of the Alarm.com Accused Products is not a staple article or commodity of commerce, and, because the functionality was designed to work with the Alarm.com Accused Products solely in a manner that is covered by the '036 Patent, it did not have a substantial non-infringing use. At least as early as the filing of the complaint, based on the foregoing facts, Alarm.com knew of or was willfully blind to the fact that such functionality was especially made and adapted for—and was in fact used in—the Alarm.com Accused Products in a manner that is covered by the '036 Patent.

178. Based on, among other things, the foregoing facts, Alarm.com contributorily infringed at least claims 1, 2 and 3 of the '036 Patent under 35 U.S.C. § 271(c).

179. Alarm.com's acts of infringement of the '036 Patent were willful and intentional under the standard of *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct.

1923 (2016). Since at least notice on October 25, 2021, Alarm.com willfully infringed the '036 Patent by refusing to take a license. Instead of taking a license to the '036 Patent, Alarm.com made the business decision to “efficiently infringe” the '036 Patent. In doing so, Alarm.com willfully infringed the '036 Patent.

180. Alarm.com’s acts of direct and indirect infringement caused damage to MPV and MPV is entitled to recover from Alarm.com the damages sustained by Plaintiff as a result of Alarm.com’s infringing acts in an amount subject to proof at trial, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court, pursuant to 35 U.S.C. § 284.

COUNT 3
INFRINGEMENT OF U.S. PATENT NO. 8,024,311

181. MPV realleges and incorporates by reference the allegations set forth above, as if set forth verbatim herein.

182. MPV is the owner, by assignment, of U.S. Patent No. 8,024,311 (Exhibit C).

183. As the owner of the '311 Patent, MPV holds all substantial rights in and under the '311 Patent, including the right to grant licenses, exclude others, and to enforce, sue, and recover damages for past and future infringement.

184. The '311 Patent is valid, enforceable and was duly issued in full compliance with Title 35 of the United States Code after a full and fair examination.

185. MPV alleges that Alarm.com has infringed, and continues to infringe, the '311 Patent.

186. The '311 Patent was issued by the United States Patent and Trademark Office on September 20, 2011. *See* Exhibit C.

187. The '311 Patent is valid and enforceable.

188. Alarm.com has directly infringed at least claims 1 and 5 of the '311 Patent by using (including its own testing), making, selling, offering for sale, licensing, and/or importing into the United States without authority products and services including the Alarm.com video services (e.g., Pro Video, Video Analytics, Premium Video), Alarm.com Residential Interactive Services, Commercial Interactive Services, Video Expansion Service, Alarm.com OpenEye software, platform and services, including video monitoring services and products accessible on the Alarm.com app, website, and dashboard and all other similar products (“Alarm.com Accused Products”) that infringe the '311 Patent.

189. The Alarm.com Accused Products satisfy each and every element of each asserted claim of the '311 Patent either literally or under the doctrine of equivalents.

190. The '311 Patent generally relates to the field of assisted annotation and retrieval of digital media assets, such as digital still images or video.

191. Claim 1 of the '311 Patent covers a method implemented at least in

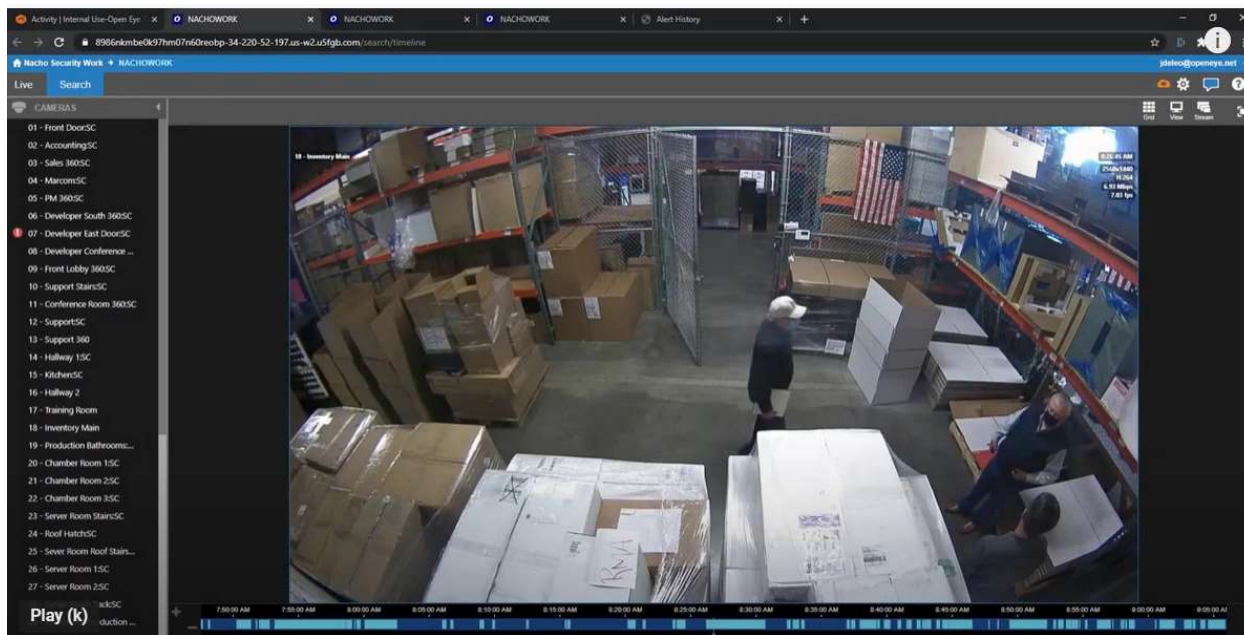
part by a data processing system, the method for identifying media assets that are potentially relevant to contextual information and comprises the steps of “receiving, by the data processing system, the contextual information, wherein the received contextual information comprises a first set of contextual information and a second set of information, the second set being received after the first set; identifying a chosen event based at least upon an analysis of the contextual information; identifying a set of media assets based at least upon an analysis of the identified event wherein the step of identifying the set of media assets comprises: identifying a superset of media assets associated with the chosen event based at least upon an analysis of the first set of contextual information at a time when the second set of contextual information has not yet therefore been received, the superset of media assets comprising more media assets than the set of media assets; and identifying the set of media assets from the superset of media assets based at least upon an analysis of the second set of contextual information; associating, in a processor-accessible memory system, at least some of the contextual information with the chosen event, or at least one asset in the set of media assets, or both the chosen event and at least one asset in the set of media assets.”

192. The Alarm.com Accused Products perform a method implemented at least in part by a data processing system, the method for identifying media assets that are potentially relevant to contextual information.

193. Alarm.com sells and provides its OpenEye software, platform, and services to Alarm.com customers. Alarm.com provides customers enhanced video verification capabilities and advanced real-time alert notifications.

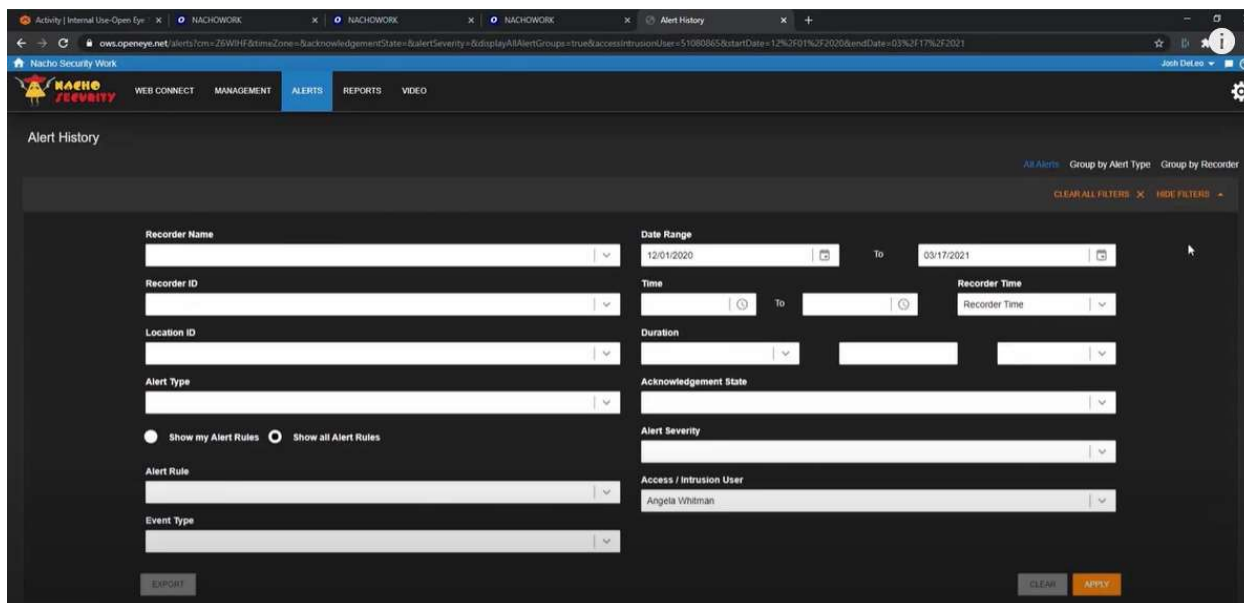
194. Alarm.com’s OpenEye software, platform and services are accessible through Alarm.com service portals including the Alarm.com app, website, business activity page and web portal.

195. Alarm.com identifies media assets that are relevant to received contextual information.



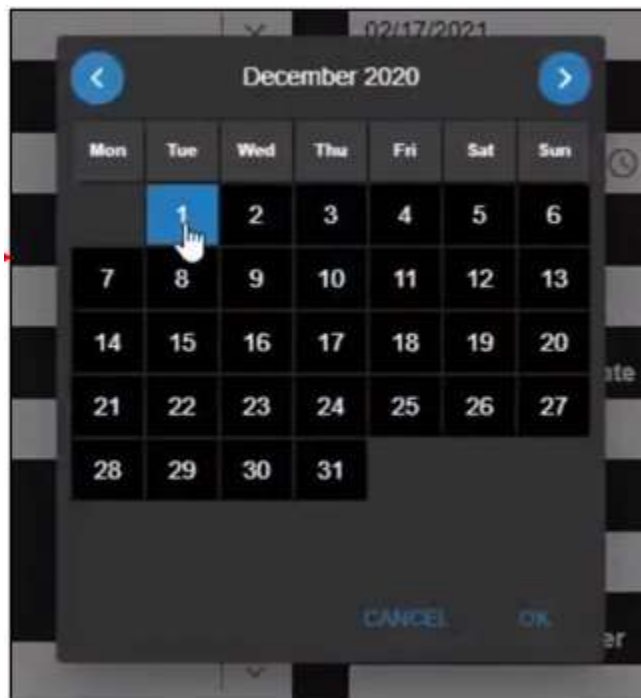
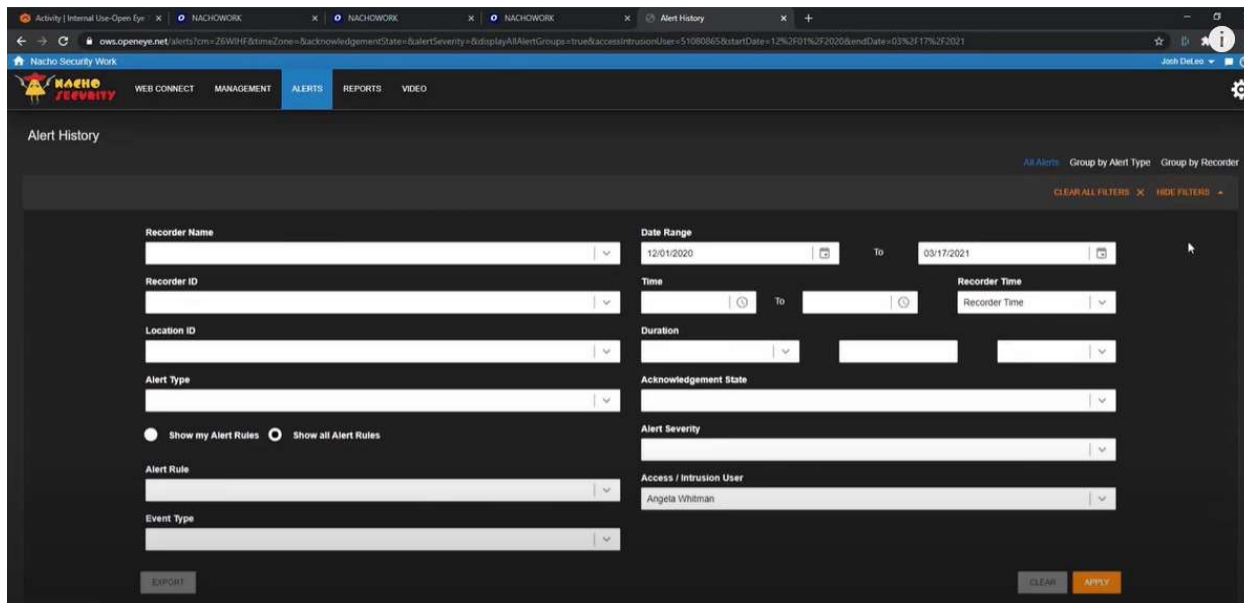
https://www.youtube.com/watch?v=_DQJevpRfB0.

196. Alarm.com allows users to search captured video by, for example, event information such as motion or door access (i.e., “contextual information”).



https://www.youtube.com/watch?v=_DQJevpRfB0.

197. Alarm.com allows a user to further filter their search results by an additional feature such as a date/time (i.e. “a second set of information . . . received after the first set”).



https://www.youtube.com/watch?v=_DQJevpRfB0.

198. Based upon an analysis of the event and data filter, Alarm.com identifies a chosen event.

| Recorder Name | Recorder ID | Alert | Event | Alert Created | Last Updated | Duration | Details |
|---------------|-------------|-------------|----------------|---------------------------|---------------------------|----------|-----------------------------|
| NACHOWORK | | Door Access | Access Granted | 03/17/2021 05:13:51AM PDT | 03/17/2021 05:13:51AM PDT | | Inventory - Main Door |
| NACHOWORK | | Door Access | Access Granted | 03/17/2021 05:13:51AM PDT | 03/17/2021 05:13:51AM PDT | | Inventory - Main Door |
| NACHOWORK | | Door Access | Access Granted | 03/16/2021 01:15:02PM PDT | 03/16/2021 01:15:02PM PDT | | Production - Inventory Door |
| NACHOWORK | | Door Access | Access Granted | 03/16/2021 01:15:02PM PDT | 03/16/2021 01:15:02PM PDT | | Production - Inventory Door |
| NACHOWORK | | Door Access | Access Granted | 03/16/2021 09:04:43AM PDT | 03/16/2021 09:04:43AM PDT | | Inventory - Main Door |
| NACHOWORK | | Door Access | Access Granted | 03/16/2021 09:04:43AM PDT | 03/16/2021 09:04:43AM PDT | | Inventory - Main Door |
| NACHOWORK | | Door Access | Access Granted | 03/16/2021 08:36:52AM PDT | 03/16/2021 08:36:52AM PDT | | Production - Inventory Door |
| NACHOWORK | | Door Access | Access Granted | 03/16/2021 08:36:52AM PDT | 03/16/2021 08:36:52AM PDT | | Production - Inventory Door |
| NACHOWORK | | Door Access | Access Granted | 03/16/2021 07:08:19AM PDT | 03/16/2021 07:08:19AM PDT | | Production - Inventory Door |
| NACHOWORK | | Door Access | Access Granted | 03/16/2021 07:08:19AM PDT | 03/16/2021 07:08:19AM PDT | | Production - Inventory Door |
| NACHOWORK | | Door Access | Access Granted | 03/16/2021 06:54:47AM PDT | 03/16/2021 06:54:47AM PDT | | Production - Inventory Door |
| NACHOWORK | | Door Access | Access Granted | 03/16/2021 06:54:47AM PDT | 03/16/2021 06:54:47AM PDT | | Production - Inventory Door |
| NACHOWORK | | Door Access | Access Granted | 03/16/2021 06:52:53AM PDT | 03/16/2021 06:52:53AM PDT | | Inventory - Main Door |
| NACHOWORK | | Door Access | Access Granted | 03/16/2021 06:52:53AM PDT | 03/16/2021 06:52:53AM PDT | | Inventory - Main Door |

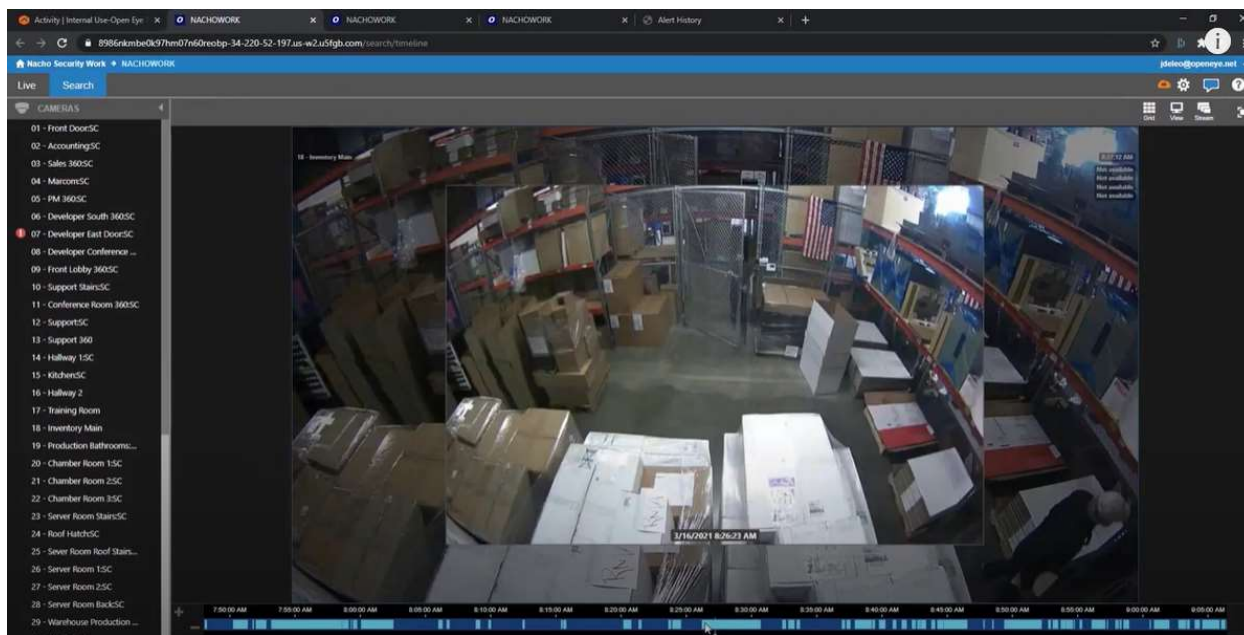
<https://www.youtube.com/watch?v=DQJevpRfB0>.

199. Alarm.com identifies and provides users with a set of captured recordings (i.e. “media assets”) based on the identified event.

| Recorder Name | Recorder ID | Alert | Event | Alert Created | Last Updated | Duration | Details |
|---------------|-------------|-------------|----------------|---------------------------|---------------------------|----------|-----------------------------|
| NACHOWORK | | Door Access | Access Granted | 03/17/2021 05:13:51AM PDT | 03/17/2021 05:13:51AM PDT | | Inventory - Main Door |
| NACHOWORK | | Door Access | Access Granted | 03/17/2021 05:13:51AM PDT | 03/17/2021 05:13:51AM PDT | | Inventory - Main Door |
| NACHOWORK | | Door Access | Access Granted | 03/16/2021 01:15:02PM PDT | 03/16/2021 01:15:02PM PDT | | Production - Inventory Door |
| NACHOWORK | | Door Access | Access Granted | 03/16/2021 01:15:02PM PDT | 03/16/2021 01:15:02PM PDT | | Production - Inventory Door |
| NACHOWORK | | Door Access | Access Granted | 03/16/2021 09:04:43AM PDT | 03/16/2021 09:04:43AM PDT | | Inventory - Main Door |
| NACHOWORK | | Door Access | Access Granted | 03/16/2021 09:04:43AM PDT | 03/16/2021 09:04:43AM PDT | | Inventory - Main Door |
| NACHOWORK | | Door Access | Access Granted | 03/16/2021 08:36:52AM PDT | 03/16/2021 08:36:52AM PDT | | Production - Inventory Door |
| NACHOWORK | | Door Access | Access Granted | 03/16/2021 08:36:52AM PDT | 03/16/2021 08:36:52AM PDT | | Production - Inventory Door |
| NACHOWORK | | Door Access | Access Granted | 03/16/2021 07:08:19AM PDT | 03/16/2021 07:08:19AM PDT | | Production - Inventory Door |
| NACHOWORK | | Door Access | Access Granted | 03/16/2021 07:08:19AM PDT | 03/16/2021 07:08:19AM PDT | | Production - Inventory Door |
| NACHOWORK | | Door Access | Access Granted | 03/16/2021 06:54:47AM PDT | 03/16/2021 06:54:47AM PDT | | Production - Inventory Door |
| NACHOWORK | | Door Access | Access Granted | 03/16/2021 06:54:47AM PDT | 03/16/2021 06:54:47AM PDT | | Production - Inventory Door |
| NACHOWORK | | Door Access | Access Granted | 03/16/2021 06:52:53AM PDT | 03/16/2021 06:52:53AM PDT | | Inventory - Main Door |
| NACHOWORK | | Door Access | Access Granted | 03/16/2021 06:52:53AM PDT | 03/16/2021 06:52:53AM PDT | | Inventory - Main Door |

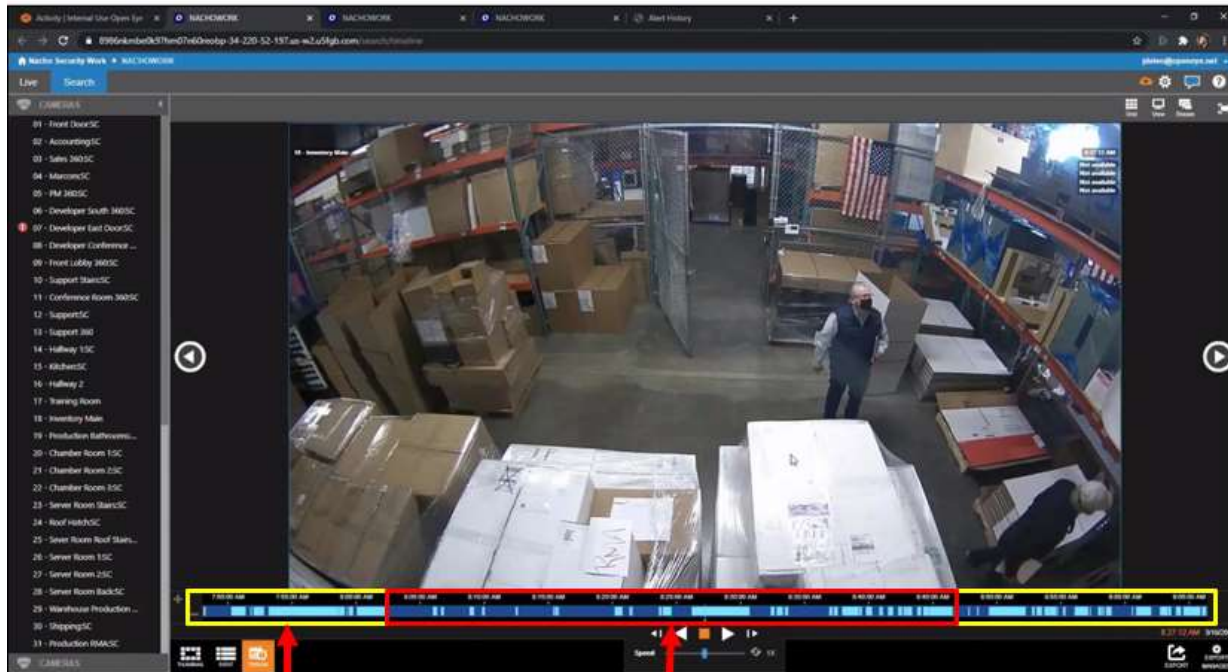
<https://www.youtube.com/watch?v=DQJevpRfB0>.

200. Alarm.com identifies a superset of recordings based on the first contextual information, such as an event which contains detected motion, before receiving the second set of contextual information. For example, if a user specifies an event which contains detect motion, the results will include more media assets than the set of media assets.



https://www.youtube.com/watch?v=_DQJevpRfB0.

201. Alarm.com identifies a set of records based on an additional user provided filter such as a date/time (i.e., “the second set of contextual information”). For example, if a user specifies a specific date or time, the results narrow to “a set of media assets from the superset of media assets.”

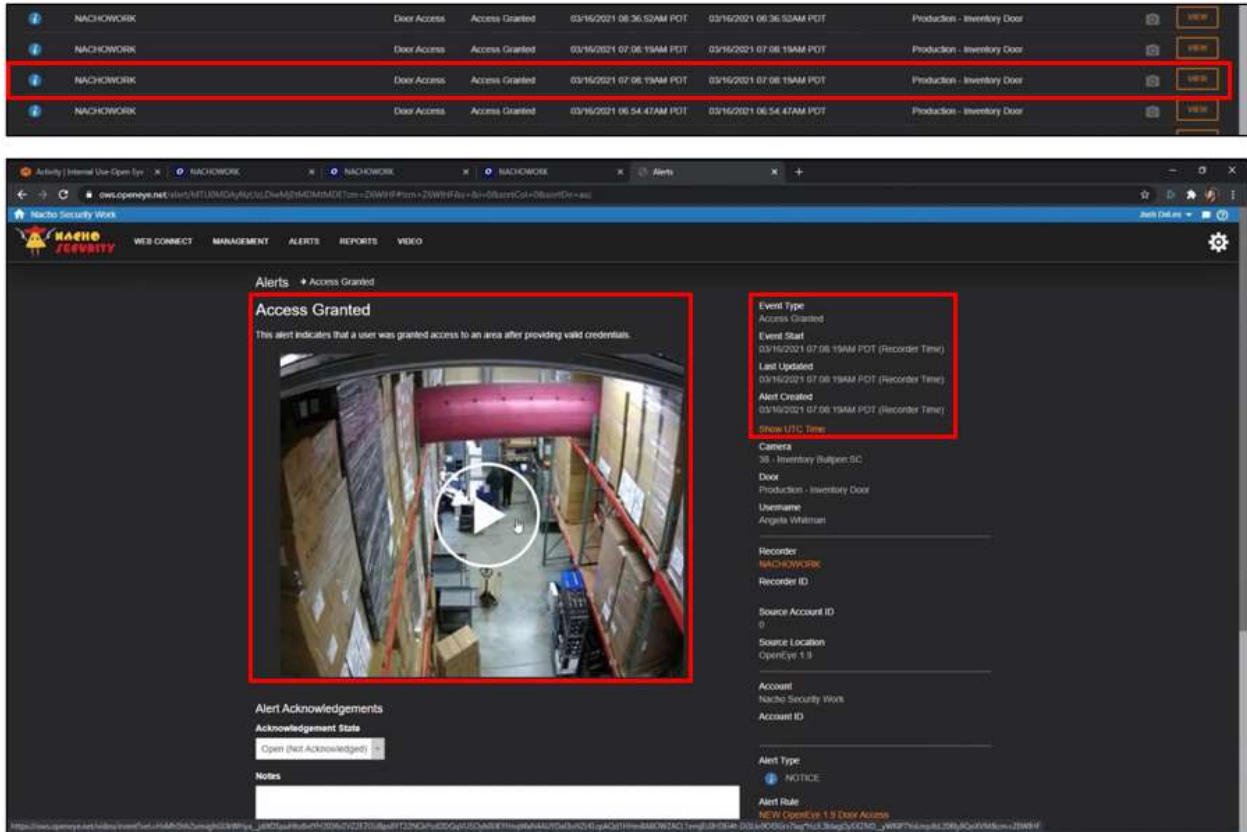


Superset of
media assets

Set of media assets

https://www.youtube.com/watch?v=_DQJevpRfB0.

202. Alarm.com associates the contextual information (e.g., door access, motion, and/or date/time) with at least one asset in the set of media assets.



https://www.youtube.com/watch?v=_DQJevpRfB0.

203. Alarm.com has tested and used the Alarm.com Accused Products in the United States.

204. Alarm.com’s activities were without authority of license under the ’311 Patent.

205. Alarm.com’s users, customers, agents and/or other third parties (collectively, “third-party infringers”) infringed and continue to infringe, including under 35 U.S.C. § 271(a), at least claim 1 of the ’311 Patent by using the Alarm.com Accused Products.

206. Alarm.com has, since at least as early as notice on October 25, 2021

and the filing of the Complaint, known or been willfully blind to the fact that the third-party infringers' use of the Alarm.com Accused Products directly infringed the '311 Patent.

207. Alarm.com's knowledge of the '311 Patent, which covered operating the Alarm.com Accused Products in their intended manner such that all limitations of at least claim 1 of the '311 Patent were met, made it known to Alarm.com that the third-party infringers' use of the Alarm.com Accused Products directly infringed the '311 Patent, or, at the very least, rendered Alarm.com willfully blind to such infringement.

208. Having known or been willfully blind to the fact that the third-party infringers' use of the Alarm.com Accused Products in their intended manner such that all limitations of at least claim 1 of the '311 Patent were met directly infringed the '311 Patent, Alarm.com, upon information and belief, actively encouraged and induced the third-party infringers to directly infringe the '311 Patent by making, using, testing, selling, offering for sale, importing and/or licensing said Alarm.com Accused Products, and by, for example: marketing the Alarm.com Accused Products to the third-party infringers; supporting and managing the third-party infringers' use of the Alarm.com Accused Products; and providing technical assistance to the third-party infringers during their continued use of the Alarm.com Accused Products by, for example, publishing the following instructional

information directing third-party infringers how to make and use the Alarm.com

Accused Products to infringe claim 1 of the '311 Patent:

- <https://alarm.com/resources>;
- <https://alarm.com/resources/business>;
- <https://alarm.com/resources/home>;
- <https://alarm.com/resources/video-surveillance-a-business-priority>;
- <https://alarm.com/resources/video-analytics>;
- <https://alarm.com/help>;
- <https://answers.alarm.com/>;
- https://answers.alarm.com/Customer/Website_and_App/Video/Recording_Video/Create_edit_a_Sensor_Opened_Closed_recording_rule;
- https://answers.alarm.com/Customer/Website_and_App/System_Management/System_Usage/Turn_sensor_activity_monitoring_on_off;
- <https://sep.yimg.com/ty/cdn/yhst-51756635596032/adc-v515-alm-dot-com-security-video-camera-data-sheet.pdf>;
- https://answers.alarm.com/Customer/Website_and_App/Video;
- https://answers.alarm.com/Customer/Website_and_App/Video/Recording_Video/Create_or_edit_a_Video_Motion_Detection_recording_rule;
- [https://answers.alarm.com/Customer/Website_and_App/Video/Video_Settings/How_should_I_configure_Video_Motion_Detection_\(VMD\)_setti](https://answers.alarm.com/Customer/Website_and_App/Video/Video_Settings/How_should_I_configure_Video_Motion_Detection_(VMD)_setti)

- [ngs_for_a_video_device](#);
- https://answers.alarm.com/Customer/Website_and_App/Video/Video_Settings/Configure_a_Video_Analytics_rule;
 - https://answers.openeye.net/Configure/Integrations/Access_and_Intrusion/Alarm.com_Access_and_Intrusion/Alarm.com_Integration_Instructions; and
 - www.alarm.com/com/login help documentation, among others.

209. In response, the third-party infringers acquired and operated the Alarm.com Accused Products such that all limitations of claims 1 and 5 of the '311 Patent were practiced.

210. Alarm.com specifically intended to induce, and did induce, the third-party infringers to infringe at least claims 1 and 5 of the '311 Patent, and Alarm.com knew of or was willfully blind to such infringement. Alarm.com advised, encouraged, and/or aided the third-party infringers to engage in direct infringement, including through its encouragement, advice, and assistance to the third-party infringers to use the Alarm.com Accused Products.

211. Based on, among other things, the foregoing facts, Alarm.com induced infringement under 35 U.S.C. § 271(b) of at least claims 1 and 5 of the '311 Patent.

212. Further, Alarm.com sold, provided and/or licensed to the third-party

infringers Alarm.com Accused Products especially made and adapted—and specifically intended by Alarm.com—to be used as components and material parts of the inventions covered by the '311 Patent. For example, playback features of the Alarm.com Accused Products which the third-party infringers used in a manner such that all limitations of at least claims 1 and 5 of the '311 Patent were met, and without which the third-party infringers would have been unable to use and avail themselves of the Alarm.com Accused Products in their intended manner.

213. Upon information and belief, Alarm.com also knew that the Alarm.com Accused Products operated in a manner that satisfied all limitations of at least claims 1 and 5 of the '311 Patent.

214. The playback technology in the Alarm.com Accused Products was specially made and adapted to infringe at least claims 1 and 5 of the '311 Patent and is not a staple article or commodity of commerce, and, because the functionality was designed to work with the Alarm.com Accused Products solely in a manner that is covered by the '311 Patent, it did not have a substantial non-infringing use. Since at least as early as the filing of the Complaint, based on the foregoing facts, Alarm.com knew of or was willfully blind to the fact that such functionality was especially made and adapted for—and was in fact used in—the Alarm.com Accused Products in a manner that is covered by the '311 Patent.

215. Based on, among other things, the foregoing facts, Alarm.com

contributorily infringed at least claims 1 and 5 of the '311 Patent under 35 U.S.C. § 271(c).

216. Alarm.com's acts of infringement of the '311 Patent were willful and intentional under the standard of *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923 (2016). Since at least as early as the filing of the complaint, Alarm.com willfully infringed the '311 Patent by refusing to take a license. Instead of taking a license to the '311 Patent, Alarm.com made the business decision to "efficiently infringe" the '311 Patent. In doing so, Alarm.com willfully infringed the '311 Patent.

217. Alarm.com's acts of direct and indirect infringement caused damage to MPV and MPV is entitled to recover from Alarm.com the damages sustained by Plaintiff as a result of Alarm.com's infringing acts in an amount subject to proof at trial, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court, pursuant to 35 U.S.C. § 284.

COUNT 4
INFRINGEMENT OF U.S. PATENT NO. 8,305,452

218. MPV realleges and incorporates by reference the allegations set forth above as if restated verbatim here.

219. MPV is the owner, by assignment, of U.S. Patent No. 8,305,452 (Exhibit D).

220. As the owner of the '452 Patent, MPV holds all substantial rights in

and under the '452 Patent, including the right to grant licenses, exclude others, and to enforce, sue, and recover damages for past and future infringement.

221. The '452 Patent was issued by the United States Patent Office on November 6, 2012. *See* Exhibit D.

222. The '452 Patent is valid, enforceable and was duly issued in full compliance with Title 35 of the United States Code after a full and fair examination.

223. Alarm.com has been and continues to practice without authorization or license one or more claims of the '452 Patent including claims 1, 2, 3, and 4.

224. Alarm.com makes, uses, offers to sell, sells, and/or imports the Alarm.com products and services including Alarm.com cameras and sensors including, but not limited to, 1080p Indoor Wi-Fi Camera (ADC-V515); ADC-V520, ADC-V520IR, ADV-V521IR, 1080p Indoor Wi-Fi Camera (ADC-V523/523X), Indoor Fixed w/IR (ADC-V522IR); Outdoor Wireless (ADC-V722W); 1080p Outdoor Wi-Fi Camera (ADC-V723/723X), 1080p Outdoor Wi-Fi Camera with Two-Way Audio (ADC-V724/724X), ADC-V620PT, 180° HD Camera (ADC-V622), Indoor/Outdoor Mini Bullet (ADC-VC726), ADC-VDB770, ADC-VC728PF, ADC-V820, ADC-V821, ADC-VC825, Indoor/Outdoor Dome (ADC-VC826), Indoor/Outdoor Bullet Camera (ADC-VC736), Indoor/Outdoor Turret Camera (ADC-VC836), Pro Series 1080p Dome PoE Camera (ADC-

VC827P), Pro Series 1080p Dome PoE Camera with Varifocal Lens (ADC-VC847PF), Pro Series 4MP Varifocal Turret Camera (ADC-VC838PF), ADC-VS120, ADC-VS121, ADC-VS420, ADC-VDB101/2, ADC-VDB105/6, ADC-VDB770 Wi-Fi Video Doorbell, Wi-Fi Doorbell Camera ADC-VDB Skybell HD, Alarm.com AD-VDB105X Slim Line II Wi-Fi Doorbell Video, ADC-V622 Alarm.com Wireless Indoor 1090p HD Wide Angle, ADC-VG22-WELL Wellcam-Wellness 180 Degree HD Camera, Alarm.com compatible cameras, and all other similar products (“Alarm.com Camera Products”), Alarm.com video services (e.g. Pro Video, Video Analytics, Premium Video), Alarm.com Residential Interactive Services, Commercial Interactive Services, Video Expansion Service, including video monitoring services and products accessible on the Alarm.com app, website, and dashboard and all other similar products (“Alarm.com Accused Products”) that infringe the ’452 Patent.

225. Alarm.com has directly infringed at least claims 1, 2, 3, and 4 of the ’452 Patent by using (including its own testing), making, selling, offering for sale, licensing, and/or importing into the United States without authority the Alarm.com products and services including Alarm.com Camera Products, Alarm.com video services (e.g. Pro Video, Video Analytics, Premium Video), Alarm.com Residential Interactive Services, Commercial Interactive Services, Video Expansion Service, including video monitoring services and products accessible on

the Alarm.com app, website, and dashboard and all other similar products (“Alarm.com Accused Products”) that infringe the ’452 Patent.

226. The accused Alarm.com devices and software satisfy each and every element of each asserted claim of the ’452 Patent either literally or under the doctrine of equivalents.

227. Alarm.com thus infringes the asserted claims of the ’452 Patent.

228. Alarm.com’s activities were without authority of license under the ’452 Patent.

229. Alarm.com cameras (e.g., Alarm.com ADC-V515) determine recording settings (i.e. “image acquisition settings”) to record video (i.e., “acquiring an image”).



1080p Indoor Wi-Fi Video Camera with HDR

Get smarter video alerts and high-quality live and recorded video with the ADC-V515. With night vision and High Dynamic Range (HDR), the ADC-V515 lets you see what's important – no matter the time of day or lighting conditions. Powerful Video Analytics from Alarm.com can detect and alert you to people, vehicles, and animals entering your property. Enjoy cloud-based storage of video clips or add an Alarm.com Stream Video Recorder or Smart View for Onboard Recording for 24/7 local recording (additional hardware required).

<https://sep.yimg.com/ty/cdn/yhst-51756635596032/adc-v515-alarm-dot-com-security-video-camera-data-sheet.pdf>.

230. Alarm.com obtains, with a camera and a sound sensor (i.e., “associated sensors”), sound information before recording video (i.e., “pre-image-acquisition information prior to an image acquisition comprising audio information”) and digital camera presence (i.e., “announcement of the digital camera’s presence”).

| Panel | Sensor Name | Status | Type | Monitoring |
|-------|---------------|----------------|---------------------------|-------------------------------------|
| 1 | One | Ok (Closed) | Door/Window | <input checked="" type="checkbox"/> |
| 2 | Two | Ok (Closed) | Door/Window or Glassbreak | <input type="checkbox"/> |
| 3 | Motion Sensor | Ok (Activated) | Motion | <input checked="" type="checkbox"/> |
| 59 | Keypad One | Ok | Fixed Panic | N/A |

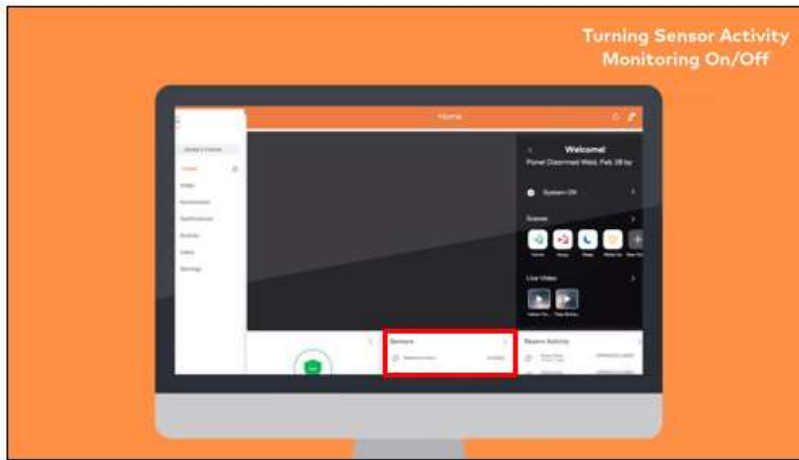
SAVE

| LED GUIDE | | |
|---|---------------------------|-------------------------------------|
| | LED STATUS | DESCRIPTION |
| STATUS LED  | Off | Power off |
| | Flashing Red | Power on, camera booting |
| | Flashing Green | Local network connection |
| | Solid Green | Connected to Alarm.com |
| | Blinking Blue | WPS mode |
| | Blinking White | Wi-Fi Access Point mode |
| TROUBLE CONDITION | Solid Red | No local or Internet connection |
| FACTORY RESET | Alternating Red and Green | Camera resetting to factory default |

<https://sep.yimg.com/ty/cdn/yhst-51756635596032/adc-v515-alarm-dot-com-security-video-camera-data-sheet.pdf>; and

https://answers.alarm.com/Customer/Website_and_App/System_Management/System_Usage/Turn_sensor_activity_monitoring_on_off.

231. Alarm.com transmits only the detected camera/sound information to the Alarm.com platform (i.e., “image-acquisition-setting providing system”) external to the digital camera.



| Panel | Sensor Name | Status | Type | Monitoring |
|-------|---------------|----------------|---------------------------|------------|
| 1 | One | Ok (Closed) | Door/Window | ☒ |
| 2 | Two | Ok (Closed) | Door/Window or Glassbreak | ☒ |
| 3 | Motion Sensor | Ok (Activated) | Motion | ☒ |
| 39 | Keypad One | Ok | Fixed Panic | N/A |

SAVE

| Sensors | Status |
|--------------------|---------------|
| Living Room Motion | ACTIVATED |
| Back Door | CLOSED |
| Basement Motion | IDLE |
| Front Door | CLOSED |
| Garage Door | CLOSED |
| Image Sensor (38) | NOT MONITORED |
| Image Sensor (40) | NOT MONITORED |

https://answers.alarm.com/Customer/Website_and_App/System_Management/System_Usage/Turn_sensor_activity_monitoring_on_off.

232. Alarm.com cameras receive (from the Alarm.com platform), an instruction to record video (i.e., “determination of image acquisition settings”), based on the indication that a sound alarm is triggered, and a particular camera is connected.

To create a Sensor Opened/Closed recording rule using the Alarm.com customer website:

1. Log into the Alarm.com customer website.
2. Click **Video**.
3. Click **Recording Rules**.
4. Click **Add New Rule**.
5. Click **Sensor Opened/Closed**.
6. Name the new recording rule.
7. Using the *When...is* dropdown menus, select which sensor and status should trigger a clip recording.
8. In *During this time frame*, select the time frame for the rule to be active.
9. In *Record clips from these cameras*, click to select the cameras that should record.
10. In *Video Clip Recipients*, click **Add Recipients** to be notified when the recording rule is triggered.
 - a. Click the entries in the *Address Book* that are to be notified, or click **New** to add a new *Address Book* entry.
 - b. Once all desired recipients are selected, click **Close**.
11. Verify the recording rule is configured with the correct settings.
12. Click **Save Rule**.

| Panel | Sensor Name | Status | Type | Monitoring ⓘ |
|-------|---------------|----------------|---------------------------|-------------------------------------|
| 1 | One | Ok (Closed) | Door/Window | <input checked="" type="checkbox"/> |
| 2 | Two | Ok (Closed) | Door/Window or Glassbreak | <input type="checkbox"/> |
| 3 | Motion Sensor | Ok (Activated) | Motion | <input checked="" type="checkbox"/> |
| 59 | Keypad One | Ok | Fixed Panic | N/A |

SAVE

https://answers.alarm.com/Customer/Website_and_App/Video/Recording_Video/

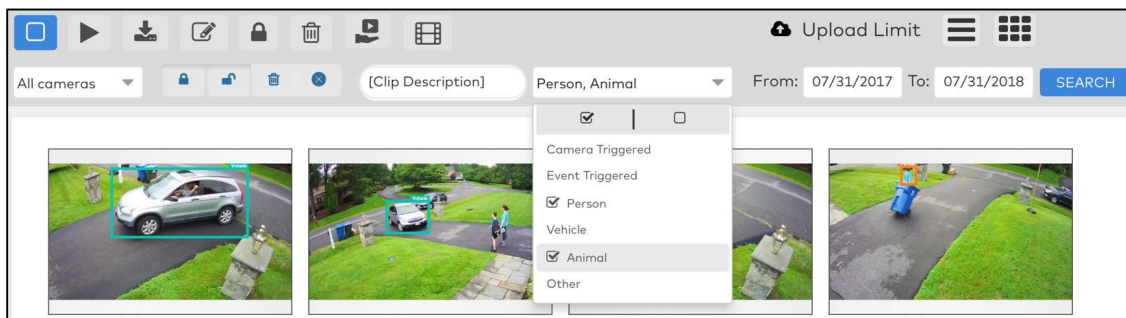
[Create edit a Sensor Opened Closed recording rule;](#) and

https://answers.alarm.com/Customer/Website_and_App/System_Management/System_Usage/Turn_sensor_activity_monitoring_on_off.

233. Alarm.com cameras perform a video recording based upon the received instructions.

To create a Sensor Opened/Closed recording rule using the Alarm.com customer website:

1. Log into the Alarm.com customer website.
2. Click **Video**.
3. Click **Recording Rules**.
4. Click **Add New Rule**.
5. Click **Sensor Opened/Closed**.
6. Name the new recording rule.
7. Using the *When...is* dropdown menus, select which sensor and status should trigger a clip recording.
8. In *During this time frame*, select the time frame for the rule to be active.
9. In *Record clips from these cameras*, click to select the cameras that should record.
10. In *Video Clip Recipients*, click **Add Recipients** to be notified when the recording rule is triggered.
 - a. Click the entries in the *Address Book* that are to be notified, or click **New** to add a new *Address Book* entry.
 - b. Once all desired recipients are selected, click **Close**.
11. Verify the recording rule is configured with the correct settings.
12. Click **Save Rule**.



https://answers.alarm.com/Customer/Website_and_App/Video/Recording_Video/

[Create edit a Sensor Opened Closed recording rule;](#) and

https://zionssecurity.com/wp-content/uploads/2018/12/View_saved_clips.jpg.

234. Alarm.com has used and tested the accused Alarm.com products and software in the United States.

235. Alarm.com's users, customers, agents and/or other third parties (collectively, "third-party infringers") infringed and continue to infringe, including under 35 U.S.C. § 271(a), at least claims 1,2, 3, and 4 of the '452 Patent by using the accused Alarm.com products and software.

236. Alarm.com has, since October 25, 2021, known or been willfully blind to the fact that third-party infringers' use of the accused Alarm.com products and software directly infringe the '452 Patent.

237. Alarm.com has knowledge of the '452 Patent, which covers operating the accused Alarm.com products and software in their intended manner such that all limitations of the asserted '452 Patent claims are met, and knowledge about how the accused products and software are used by the third-party infringers to practice the '452 Patent.

238. With knowledge or willful blindness to the fact that the third-party infringers' use of the accused Alarm.com devices and software in accordance with their intended manner of use practices the asserted claims of the '452 Patent, Alarm.com actively encourages the third-party infringers to directly infringe the '452 Patent by, for example: marketing them to the third-party infringers;

supporting and managing the third-party infringers' use; and providing technical assistance to the third-party infringers during their continued use of the accused Alarm.com products by, for example, publishing instructional information directing third-party infringers how to make and use the infringing products to infringe the asserted claims of the '452 Patent.

239. Having known or been willfully blind to the fact that the third-party infringers' use of the accused Alarm.com products and software in their intended manner such that all limitations of claims 1, 2, 3 and 4 of the '452 Patent were met directly infringed the '452 Patent, Alarm.com, upon information and belief, actively encouraged and induced the third-party infringers to directly infringe the '452 Patent by making, using, testing, selling, offering for sale, importing and/or licensing said accused Alarm.com products and software, and by, for example: marketing the accused Alarm.com products and software to the third-party infringers; supporting and managing the third-party infringers' use of the accused Alarm.com products and software; and providing technical assistance to the third-party infringers during their continued use of the accused Alarm.com products and software by, for example, publishing the following instructional information directing third-party infringers how to make and use the accused Alarm.com products and software to infringe claims 1, 2, 3, and 4 of the '452 Patent:

- <https://alarm.com/resources>;

- <https://alarm.com/resources/business;>
- <https://alarm.com/resources/home;>
- <https://alarm.com/resources/video-surveillance-a-business-priority;>
- <https://alarm.com/resources/video-analytics;>
- <https://alarm.com/help;>
- <https://answers.alarm.com/;>
- https://answers.alarm.com/Customer/Website_and_App/Video/Recording_Video/Create_edit_a_Sensor_Opened_Closed_recording_rule;
- https://answers.alarm.com/Customer/Website_and_App/System_Management/System_Usage/Turn_sensor_activity_monitoring_on_off
- <https://sep.yimg.com/ty/cdn/yhst-51756635596032/adc-v515-alm-dot-com-security-video-camera-data-sheet.pdf;>
- https://answers.alarm.com/Customer/Website_and_App/Video;
- https://answers.alarm.com/Customer/Website_and_App/Video/Recording_Video/Create_or_edit_a_Video_Motion_Detection_recording_rule;
- [https://answers.alarm.com/Customer/Website_and_App/Video/Video_Settings/How_should_I_configure_Video_Motion_Detection_\(VMD\)_settings_for_a_video_device;](https://answers.alarm.com/Customer/Website_and_App/Video/Video_Settings/How_should_I_configure_Video_Motion_Detection_(VMD)_settings_for_a_video_device;)
- https://answers.alarm.com/Customer/Website_and_App/Video/Video_Settings/Configure_a_Video_Analytics_rule; and

- www.alarm.com/com/login help documentation, among others.

240. Alarm.com induces the third-party infringers to infringe the asserted claims of the '452 Patent by directing or encouraging them to operate the infringing devices and software that satisfy all limitations of the asserted claims of the '452 Patent.

241. For example, Alarm.com advertises and promotes the features and functions of the accused devices and software and encourages the third-party infringers to operate them in an infringing manner. Alarm.com further provides technical assistance as to how the infringing products should be used by the third-party infringers by, for example, publishing instructional information directing third-party infringers how to use the infringing features to practice asserted claims 1, 2, 3, and 4 of the '452 Patent.

242. In response, the third-party infringers acquire and operate the accused Alarm.com devices and software such that all limitations of the asserted claims of the '452 Patent are practiced.

243. Alarm.com specifically intends to induce, and does induce, the third-party infringers to infringe claims 1, 2, 3, and 4 of the '452 Patent, and Alarm.com knew of or was willfully blind to such infringement.

244. Based upon the foregoing facts, among other things, Alarm.com induces infringement under 35 U.S.C. § 271(b) of at least claims 1, 2, 3 and 4 of

the '452 Patent.

245. Alarm.com has knowledge, prior to and by this complaint, that the accused Alarm.com devices and software are made and operate in a manner that satisfies all limitations of at least claims 1, 2, 3, and 4 of the '452 Patent.

246. Upon information and belief, Alarm.com's acts of infringement of the '452 Patent continue since this complaint was filed and are, therefore, carried out with knowledge of the asserted claims of the '452 Patent and how the accused Alarm.com software and services infringe them. Rather than take a license to the '452 Patent, Alarm.com's ongoing infringing conduct reflects a business decision to "efficiently infringe" the asserted claims and in doing so constitutes willful infringement under the standard of *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923 (2016).

247. Alarm.com's acts of direct and indirect infringement have caused and continue to cause damage to MPV for which MPV is entitled to recover damages sustained as a result of Alarm.com's infringing acts in an amount subject to proof at trial, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court, pursuant to 35 U.S.C. § 284.

COUNT 5
INFRINGEMENT OF U.S. PATENT NO. 7,035,461

248. MPV realleges and incorporates by reference the allegations set forth above as if restated verbatim here.

249. MPV is the owner, by assignment, of U.S. Patent No. 7,035,461 titled “Method for Detecting Objects in Digital Images.” A true and correct copy of the ’461 Patent is attached as Exhibit E.

250. As the owner of the ’461 Patent, MPV holds all substantial rights in and under the ’461 Patent, including the right to grant licenses, exclude others, and to enforce, sue, and recover damages for past and future infringement.

251. The ’461 Patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code after a full and fair examination.

252. Alarm.com has directly infringed at least claim 3 of the ’461 Patent by making, using, testing, selling, offering for sale, importing and/or licensing in the United States without authority Alarm.com’s Video Analytics service that performs a method for detecting objects in a digital image.



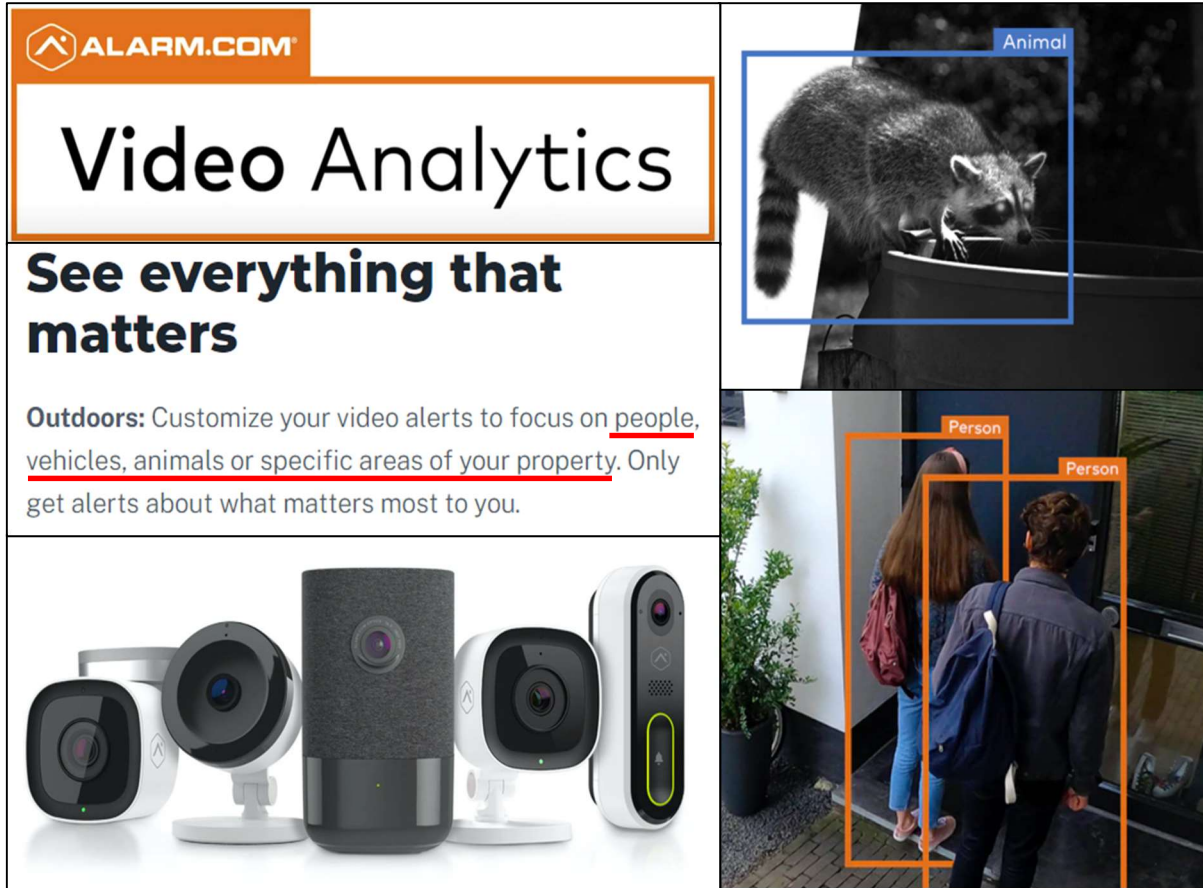
Alarm.com Launches Video Analytics

October 30, 2018

Artificial intelligence and computer vision technology power new video analytics service

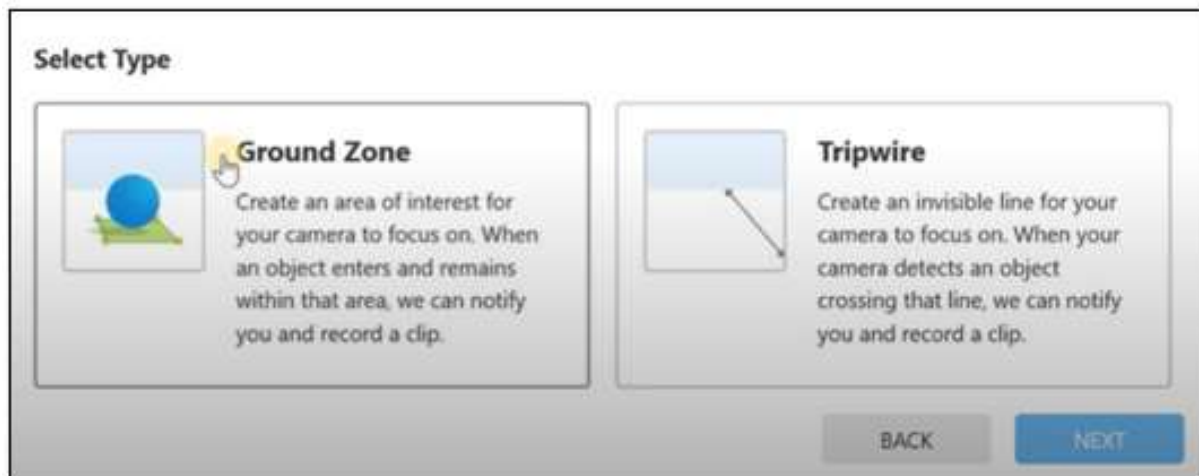
TYSONS, Va., Oct. 30, 2018 (GLOBE NEWSWIRE) -- Alarm.com (Nasdaq: ALRM), the leading platform for the intelligently connected property, announces a newly deployed artificial intelligence (AI) architecture and video analytics service. The Alarm.com platform can now monitor video streams in real-time and alert property owners about important events, while ignoring routine movement. The new service is available now for residential and business subscribers.

253. Alarm.com’s Video Analytics service enables alerts focused on objects detected in a digital image.



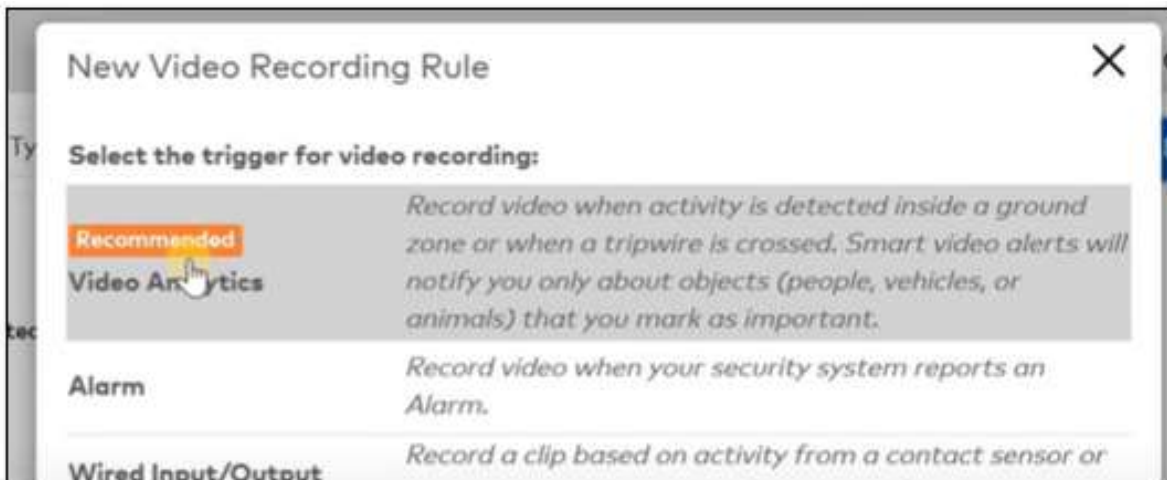
The advertisement features the Alarm.com logo in the top left corner. The main headline reads "Video Analytics" in a large, bold font. Below this, the sub-headline says "See everything that matters". A descriptive paragraph follows: "Outdoors: Customize your video alerts to focus on people, vehicles, animals or specific areas of your property. Only get alerts about what matters most to you." The text "people, vehicles, animals or specific areas of your property" is underlined in red. To the right of the text are two images: the top one shows a raccoon with a blue bounding box and the label "Animal"; the bottom one shows two people walking with orange bounding boxes and the label "Person". Below the text is a row of five different camera models. At the bottom right, there is a "BACK" button and a blue "NEXT" button.

254. Alarm.com Video Analytics generates a ground zone (i.e., “first segmentation map”) of a scene based upon motion (i.e., “non-object specific criterion”) in a user-specified region.



The screenshot shows a "Select Type" interface with two options. The first option is "Ground Zone", which includes an icon of a blue sphere on a green base and the text: "Create an area of interest for your camera to focus on. When an object enters and remains within that area, we can notify you and record a clip." The second option is "Tripwire", which includes an icon of a blue line with an arrow and the text: "Create an invisible line for your camera to focus on. When your camera detects an object crossing that line, we can notify you and record a clip." At the bottom of the interface are "BACK" and "NEXT" buttons.

255. Activity detected in a ground zone may trigger video recording and notification of objects marked as important.

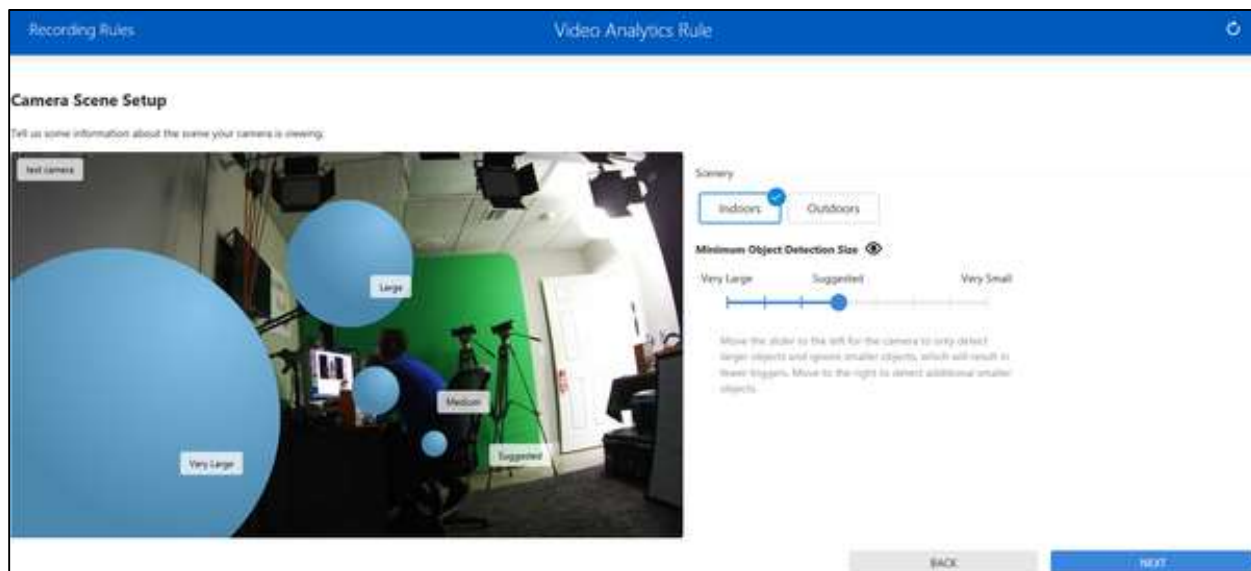


256. Video recording rules based upon detection are configurable by camera.

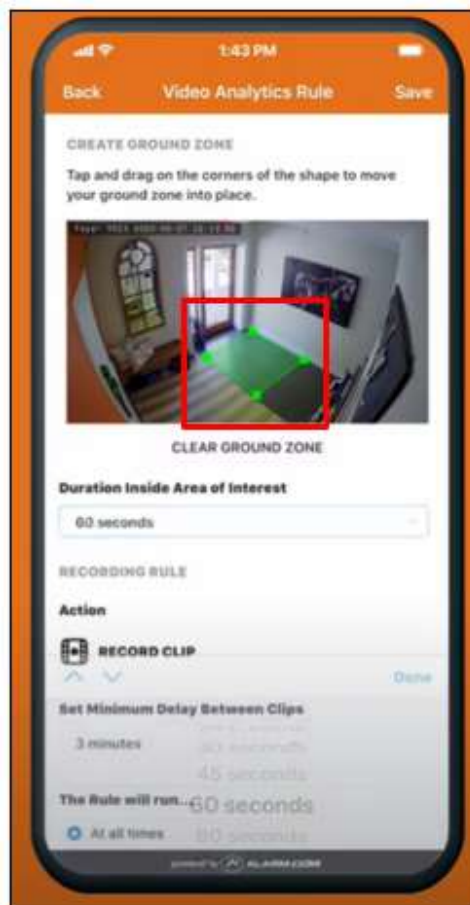


257. Alarm.com Video Analytics generates an object size map (i.e., “second segmentation map”) to detect objects of certain sizes (i.e., “object specific

criterion”).

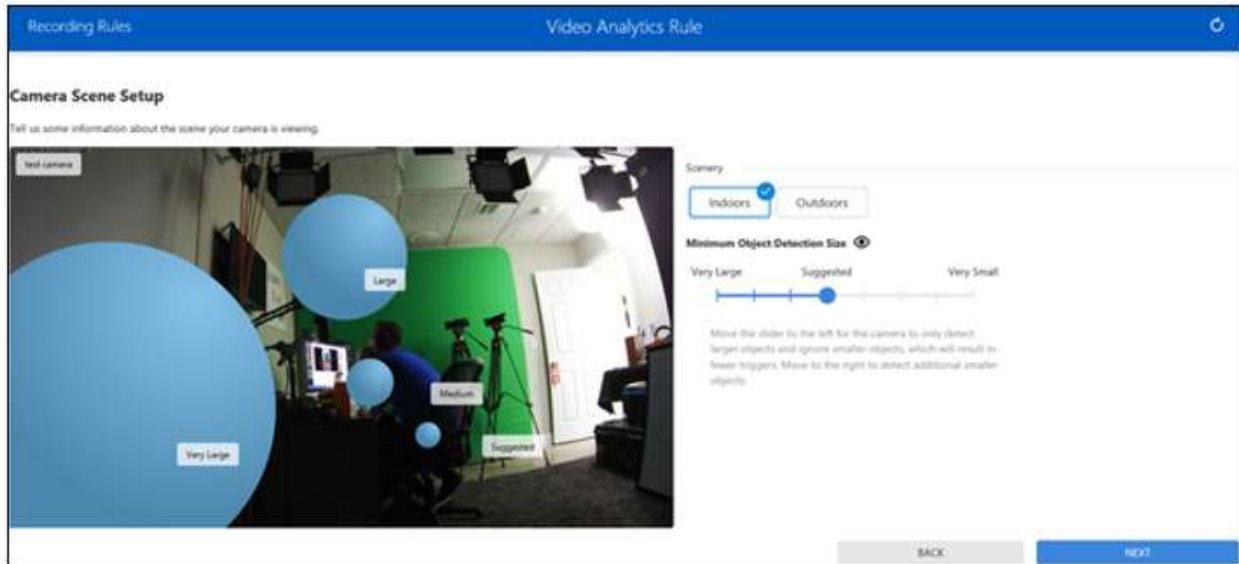


258. Alarm.com Video Analytics detects objects in a digital image using



the ground zone and object size map.

259. Configurable recording rules provide an object size segmentation map.



260. In normal operation, Alarm.com's Video Analytics detects motion against a stationary background in a specified area performing pattern matching using computer vision in the ground zone map and an object determination algorithm within the object size map then merges the results to detect whether a person, animal, or vehicle is in motion in the ground zone.

261. Alarm.com Video Analytics thus infringes at least claim 3 of the '461 Patent literally or under the doctrine of equivalents.

262. Alarm.com induces users, customers, and third-party infringers to practice the '461 Patent by directing, instructing, and encouraging them to use and

operate the Video Analytics service to practice the claimed subject matter.

263. For example, Alarm.com advertises and promotes the infringing features and functions and encourages third-party infringers to use them in an infringing manner. Alarm.com provides technical assistance as to how the Video Analytics service should be used by publishing instructional information directing third-parties how to practice the '461 Patent.

264. Alarm.com has known of the '461 Patent and how its Video Analytics service infringes at least claim 3 since at least as early as this Complaint.

265. With that knowledge, Alarm.com specifically intends to induce, and does induce, third-party infringers to practice at least claim 3 of the '461 Patent.

266. Alarm.com's acts of direct and indirect infringement have caused and continue to cause damage to MPV for which MPV is entitled to recover damages sustained as a result of Alarm.com's infringing acts in an amount subject to proof at trial, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court, pursuant to 35 U.S.C. § 284.

NOTICE

267. MPV does not currently distribute, sell, offer for sale, or make products embodying the Asserted Patents.

268. Alarm.com had notice of infringement of the '452, '345, '311, and '036 Patents since at least as early as October 25, 2021.

269. MPV has complied with all notice requirements of 35 U.S.C. § 287.

NOTICE OF REQUIREMENT OF LITIGATION HOLD

270. Alarm.com is hereby notified it is legally obligated to locate, preserve, and maintain all records, notes, drawings, documents, data, communications, materials, electronic recordings, audio/video/photographic recordings, and digital files, including edited and unedited or “raw” source material, and other information and tangible things that Alarm.com knows, or reasonably should know, may be relevant to actual or potential claims, counterclaims, defenses, and/or damages by any party or potential party in this lawsuit, whether created or residing in hard copy form or in the form of electronically stored information (hereafter collectively referred to as “Potential Evidence”).

271. As used above, the phrase “electronically stored information” includes without limitation: computer files (and file fragments), e-mail (both sent and received, whether internally or externally), information concerning e-mail (including but not limited to logs of e-mail history and usage, header information, and deleted but recoverable e-mails), text files (including drafts, revisions, and active or deleted word processing documents), instant messages, audio recordings and files, video footage and files, audio files, photographic footage and files, spreadsheets, databases, calendars, telephone logs, contact manager information, internet usage files, and all other information created, received, or maintained on

any and all electronic and/or digital forms, sources and media, including, without limitation, any and all hard disks, removable media, peripheral computer or electronic storage devices, laptop computers, mobile phones, personal data assistant devices, Blackberry devices, iPhones, video cameras and still cameras, and any and all other locations where electronic data is stored. These sources may also include any personal electronic, digital, and storage devices of any and all of Alarm.com's agents, resellers, distributors or employees if Alarm.com's electronically stored information resides there.

272. Alarm.com is hereby further notified and forewarned that any alteration, destruction, negligent loss, or unavailability, by act or omission, of any Potential Evidence may result in damages or a legal presumption by the Court and/or jury that the Potential Evidence is not favorable to Alarm.com's claims and/or defenses. To avoid such a result, Alarm.com's preservation duties include, but are not limited to, the requirement that Alarm.com immediately notify its agents, distributors, and employees to halt and/or supervise the auto-delete functions of Alarm.com's electronic systems and refrain from deleting Potential Evidence, either manually or through a policy of periodic deletion.

JURY DEMAND

MPV hereby demands a trial by jury on all claims, issues, and damages so triable.

PRAYER FOR RELIEF

MPV prays for the following relief:

- a. That Alarm.com be summoned to appear and answer;
- b. That the Court enter judgment that Alarm.com has infringed the '452, '345, '311, '036, and '461 Patents.
- c. That the Court grant MPV judgment against Alarm.com for all actual, consequential, special, punitive, increased, and/or statutory damages, including, if necessary, an accounting of all damages; pre- and post-judgment interest as allowed by law; and reasonable attorney's fees, costs, and expenses incurred in this action;
- d. That Alarm.com's infringement be found to have been willful;
- e. That this case be found to be exceptional under 35 U.S.C. § 285; and
- f. That MPV be granted such other and further relief as the Court may deem just and proper under the circumstances.

Dated: September 19, 2022

Respectfully submitted,

CONNOR LEE & SHUMAKER PLLC

By: 

Cabrach J. Connor

cab@clands.com

Texas Bar No. 24036390

Jennifer Tatum Lee

jennifer@clands.com

Texas Bar No. 24046950

John M. Shumaker

john@clands.com

Texas Bar No. 24033069

609 Castle Ridge Road, Suite 450

Austin, Texas 78746

512.646.2060 Telephone

888.387.1134 Facsimile