IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS MARSHALL DIVISION

NEC CORPORATION,

Plaintiff,

v.

Case No. 2:24-cv-720

ANKER INNOVATIONS TECHNOLOGY CO., LTD. and ANKER INNOVATIONS LTD. (d/b/a "eufy") JURY TRIAL DEMANDED

Defendants.

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff NEC Corporation ("NEC"), by and through its undersigned counsel, files this complaint under 35 U.S.C. § 271 against Defendants Anker Innovations Technology Co., Ltd. and Anker Innovations Ltd. (collectively, "Anker"), and alleges as follows, upon actual knowledge with respect to itself and its own acts, and upon information and belief as to all other matters.

NATURE OF THE ACTION

1. This is an action for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. § 1, *et seq.*

THE PARTIES

2. Plaintiff NEC Corporation is a corporation organized under the laws of Japan, with its principal place of business at 7-1, Shiba 5-chome Minato-ku, Tokyo 108-8001 Japan.

3. On information and belief, Defendant Anker Innovations Technology Co., Ltd. is a corporation organized under the laws of the People's Republic of China, with a principal place of business located at Room 701, Building 7, Zhongdian Software Park, No. 39 Jianshan Road, HIGH-TECH Zone, Changsha City, Hunan, People's Republic of China.

4. On information and belief, Defendant Anker Innovations Ltd. is a corporation organized under the laws of Hong Kong, with a principal place of business located at Room 1318-19, Hollywood Plaza, 610 Nathan Road, Mongkok, Kowloon, Hong Kong SAR, People's Republic of China.

5. On information and belief, Anker sells, offers for sale, manufactures, uses, or imports products into the United States under the brand name "eufy." For example, the eufy website identifies eufy as one of Anker Innovations' "5 key brands."

	Anker	Innovati	ions	
	of smart devices	e charging experts and innovators for entertainment, travel, and smar ation is being led by our 5 key branc		¥.
ANKER	soundcore	OUFY	NEBULA	ROAV

See https://www.eufy.com/about?ref=footer.

JURISDICTION AND VENUE

6. This Court has subject matter jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1338(a) because the action arises under the patent laws of the United States, 35 U.S.C. § 271, *et seq.*

7. This Court has personal jurisdiction over Anker pursuant to due process and/or the Texas Long Arm Statute because, *inter alia*, (i) Anker has done and continues to do business in the United States, including in the State of Texas; (ii) Anker has committed and continues to commit acts of patent infringement in the United States, including in the State of Texas, including making, using, offering to sell, and/or selling accused products in the United States and Texas, and/or importing accused products into the United States and Texas, including by Internet sales and sales via retail and wholesale stores, inducing others to commit acts of patent infringement in

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 3 of 86 PageID #: 3

the United States and Texas, and/or committing at least a portion of any other infringements alleged herein.

8. In addition, or in the alternative, this Court has personal jurisdiction over Anker pursuant to Fed. R. Civ. P. 4(k)(2).

9. Venue is proper in this District as to Defendants. Anker Innovations Technology Co., Ltd. is organized under the laws of the People's Republic of China, and Anker Innovations Ltd. is organized under the laws of Hong Kong. 28 U.S.C. § 1391(c)(3) provides that "a defendant not resident in the United States may be sued in any judicial district, and the joinder of such a defendant shall be disregarded in determining where the action may be brought with respect to other defendants."

PATENTS-IN-SUIT

10. The Asserted Patents are U.S. Patent Nos. 9,953,240; 10,037,467; 10,970,995; 10,999,635; 11,210,526; and 11,537,814 (collectively, the "Asserted Patents").

11. U.S. Patent No. 9,953,240 ("the '240 Patent," attached hereto at Exhibit 1) duly issued on April 24, 2018, and is entitled "Image Processing System, Image Processing Method, and Recording Medium for Detecting a Static Object." The '240 Patent claims foreign priority to JP 2013-115544, filed on May 31, 2013. NEC is the owner by assignment of the '240 Patent and possesses all rights under the '240 Patent, including the exclusive right to recover for past and future infringement.

12. U.S. Patent No. 10,037,467 ("the '467 Patent," attached hereto at Exhibit 2) duly issued on July 31, 2018 and is entitled, "Information Processing System." The '467 Patent claims foreign priority to JP 2013-200065, filed on September 26, 2013. NEC is the owner by assignment of the '467 Patent and possesses all rights under the '467 Patent, including the exclusive right to recover for past and future infringement.

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 4 of 86 PageID #: 4

13. U.S. Patent No. 10,970,995 ("the '995 Patent," attached hereto at Exhibit 3) duly issued on April 6, 2021 and is entitled, "System for Monitoring Event Related Data." The '995 Patent claims foreign priority to SG 10201501222X, filed on February 17, 2015. NEC is the owner by assignment of the '995 Patent and possesses all rights under the '995 Patent, including the exclusive right to recover for past and future infringement.

14. U.S. Patent No. 10,999,635 ("the '635 Patent," attached hereto at Exhibit 4) duly issued on May 4, 2021 and is entitled, "Image Processing System, Image Processing Method, and Program." The '635 Patent claims foreign priority to JP 2012-170406, filed on July 31, 2012. NEC is the owner by assignment of the '635 Patent and possesses all rights under the '635 Patent, including the exclusive right to recover for past and future infringement.

15. U.S. Patent No. 11,210,526 ("the '526 Patent," attached hereto as Exhibit 5) duly issued on December 28, 2021 and is entitled, "Video Surveillance System, Video Processing Apparatus, Video Processing Method, and Video Processing Program." The '526 Patent claims foreign priority to JP 2013-136953, filed on June 28, 2013. NEC is the owner by assignment of the '526 Patent and possess all rights under the '526 Patent, including the exclusive right to recover for past and future infringement.

16. U.S. Patent No. 11,537,814 ("the '814 Patent," attached hereto as Exhibit 6) duly issued on December 27, 2022 and is entitled, "Data Providing System and Data Collection System." The '814 Patent claims priority to PCT No. PCT/JP2018/017609, filed on May 7, 2018. NEC is the owner by assignment of the '814 Patent and possess all rights under the '814 Patent, including the exclusive right to recover for past and future infringement.

BACKGROUND

17. Founded in 1899 and based in Tokyo, Japan, NEC (Nippon Electric Company) has throughout its 120-year history been a world leader and innovator across a variety of technical

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 5 of 86 PageID #: 5

industries, including in electronic devices, computing, computer displays, semiconductors, mobile phones and communications, and most recently, software and artificial intelligence solutions. Over the years, NEC has expanded significant resources on research, development, and innovation, and on capturing and protecting the fruits of those efforts in patent applications filed around the world. The patents-in-suit, which provide improved surveillance technology, were born from this history of innovation.

18. In the realm of surveillance and camera technology, NEC has made remarkable strides, particularly in the development of advanced biometric recognition systems. NEC's biometric solutions leverage cutting-edge technologies that have been consistently ranked very highly in global benchmark tests by the U.S. National Institute of Standards and Technology (NIST):

Since participating in benchmark tests run by the US National Institute of Standards and Technology (NIST) in 2009, NEC has been ranked number one on multiple occasions. We will continue to pursue even greater accuracy and speed through research and development.



Note: NIST evaluations do not constitute an endorsement by the U.S. Government of any particular product, service, or company.

See https://jpn.nec.com/biometrics/face/history.html.

NEC iris recognition technology ranks first in NIST accuracy testing - Joins NEC's face recognition as a top ranked technology and strengthens touchless and secure multimodal biometric authentication -

News Room

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Tokyo, September 22, 2021 - <u>NEC Corporation</u> (NEC; TSE: 6701) today announced that its iris recognition technology ranked first in the world in the most recent iris recognition technology benchmark test, IREX 10 (*1), conducted by the globally authoritative U.S. National Institute of Standards and Technology (NIST).

See https://www.nec.com/en/press/202109/global_20210922_02.html.

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 6 of 86 PageID #: 6

19. NEC has been researching and perfecting some of these systems since 1971, with the goal of enhancing security, safety, and convenience across various sectors, including public infrastructure, transportation, and law enforcement. To date, NEC has deployed over 1,000 biometric systems in seventy countries regions. See over and https://www.nec.com/en/global/solutions/biometrics/index.html; also see https://www.annualreports.com/HostedData/AnnualReports/PDF/OTC NIPNF 2023.pdf.

20. NEC is committed to creating a safer and more secure society through its investment in facial recognition technology, which it has developed through more than thirty years of continuous research. *See* <u>https://www.nec.com/en/global/solutions/biometrics/index.html</u>. For example, NEC seeks to enhance customer privacy and security by using facial recognition technology to prevent risks such as impersonation and fraud. Right now, many of NEC's facial recognition technology solutions are being implemented for first-time use in new areas and venues worldwide, such as end-to-end airport travel experiences in the U.S. and EU Summit Security in Europe. Frost & Sullivan consistently recognizes NEC as a leader in Biometrics technology in recognition of its leading position in the industry and foresight in innovating and developing future face recognition biometric solutions that maximize customer value and experience. *See* <u>https://www.nec.com/en/press/201905/global_20190529_01.html</u>; *see also* <u>https://www.nec.com/en/press/202302/global_20230217_01.html</u>.

21. NEC is also committed to using its facial recognition systems to increase public and national security. For example, NEC's facial recognition technology solutions have been utilized for criminal investigations, national ID systems, and immigration control.

22. NEC's technological achievements in surveillance extend beyond biometric recognition. In particular, NEC aims to develop artificial intelligence (AI) that is truly beneficial

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 7 of 86 PageID #: 7

to its customers and society through its development of sophisticated camera systems that incorporate AI machine learning algorithms. These smart camera systems are capable of performing real-time analysis of image data, which is critical for applications such as traffic management, crowd control, and incident detection. For example, NEC has created a road surface inspection system, which implements an AI that analyzes image data captured by drive recorders to detect road surface disrepair. This system enhances preventive road maintenance to greatly improve public safety and infrastructure. By integrating AI with camera technology that not only captures but also analyzes and responds to image data in real time, NEC has developed a variety of proprietary technologies to support social infrastructure and mission-critical systems.

23. The global recognition of NEC's technological contributions is reflected in its extensive patent portfolio. NEC has cumulatively held the highest number of international patent applications in face recognition, biometrics, video analytics, and AI in the world since 2001. NEC's patent portfolios related to these core technologies have earned it recognition as a Clarivate Top 100 Global Innovator for thirteen consecutive years. https://www.nec.com/en/press/202403/global_20240307_01.html.

24. NEC prides itself on its strong intellectual property strategy, which is centered around the protection and utilization of its innovations on a global scale. NEC proactively licenses patents and other intellectual property that contribute to societal development and market expansion. In collaboration with both its Intellectual Property Management Division and business units, NEC strategically selects intellectual property for licensing, guided by studying and analyzing the latest global societal trends and future forecasts. This strategy allows NEC to maintain its competitive edge and reputation as a global leader in technology.

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 8 of 86 PageID #: 8

25. As part of NEC's intellectual property strategy, NEC has recently embraced an open innovation approach by engaging with external business partners, such as start-up corporations, to promote R&D co-creation and build upon its robust patent portfolio.

26. NEC first sent a letter to the legal departments of Anker Innovations Technology Co., Ltd. and Anker Innovations Ltd. on June 3, 2024, offering to license patents currently owned by NEC, including the '240, '467, '995, '635, and '526 Patents. The correspondence included a list of NEC patents offered for licensing and identified Anker products, such as the eufy Video Doorbell E340 (Battery Powered), eufy HomeBase S380 ("HomeBase 3"), eufy 4G LTE Cam S330 ("eufyCam3"), eufy Pet Camera Pro N140, eufy's BionicMind AI Service, eufy security application, and eufy servers supporting such products, that were covered by claims of the offered patents.

27. Despite receipt of NEC's letter, Defendants have not engaged in discussions or negotiations with NEC. Defendants have been operating and continue to operate without a license to NEC's patents.

COUNT 1 – INFRINGEMENT OF U.S. PATENT NO. 9,953,240

28. NEC incorporates paragraphs 1-27 above by reference.

29. The '240 Patent is directed to an image processing system for detecting a static object. For example, the '240 Patent discloses a memory storing instructions and at least one processor configured to execute the instructions to identify static areas from input images captured at a plurality of time points, wherein, in the static areas, the input images include motion indicating a value smaller than a threshold value; generate a first image using the static areas of respective input images captured in a first time span from a processing time point, a second image using the static areas of respective input images captured in a third image using the static areas of respective input images captured in a third image using the static areas of respective input images captured in a third image using the static areas of respective input images captured in a third image using the static areas of respective input images captured in a third time

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 9 of 86 PageID #: 9

span from the processing time point; compare the first image and the second image and identify an area having a difference; and classify static objects included in the input images according to a length of a static time period, based on a comparison of the first image, the second image, and the third image.

30. The '240 Patent explains that, at the time of its priority date, there were proposals of techniques for identifying objects or a person standing still for a certain period of time or longer in video surveillance applications. '240 Patent at 1:25-28. However, motion detection technology encountered difficulty with generating an appropriate model of the background of the captured video, which lead to problems detecting objects in certain environments or varying backgrounds, such as areas of high congestion or multiple moving people or objects. *Id.* at 1:46-50.

31. The '240 Patent solved these problems by providing improved background identification techniques in image processing, which improves accuracy in static object detection. *Id.* at 2:38-40. More specifically, the claimed invention includes at least one processor configured to execute the instructions to identify static areas from input images captured at a plurality of time points, wherein, in the static areas, the input images include motion indicating a value smaller than a threshold value. As such, the claimed invention can generate a first image using the static areas of respective input images captured in a first time span from a processing time point, a second image using the static areas of respective input images captured in a second time span from the processing time point, and a third image using the static areas of respective input images captured in a third time span from the processing time point. Accordingly, the first and second images are compared to identify an area having a difference and static objects including in the input images can be classified according to a length of a static time period by comparing the various images. Therefore, an image processing system with improved static object detection is achieved.

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 10 of 86 PageID #: 10

32. Defendants have directly infringed one or more claims of the '240 Patent in this District and elsewhere in Texas, including at least claim 1 literally and/or under the doctrine of equivalents, by or through its sale, offer for sale, manufacture, use, or import of its surveillance products with package notifications (*i.e.*, "Delivery Guard"), including at least the Video Doorbell (Wired) S330; Video Doorbell E340 (Battery Powered); Video Doorbell E340 + Rechargeable Battery Pack with USB-C; Video Doorbell S330; Video Doorbell S330; Add-on; Whole Protection E Deluxe Bundle; Whole Protection E Premium Business Bundle; Whole Protection E Standard Plus Bundle; Video Doorbell Dual 2K (Battery-Powered); eufy's BionicMind AI Service, eufy security application, and eufy servers supporting such products (collectively, "the Accused '240 Eufy Products"). NEC reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the Accused '240 Eufy Products are identified to describe the Defendants' infringement and in no way limit the discovery and infringement allegations against Defendants concerning other devices that incorporate the same or reasonably similar functionalities.

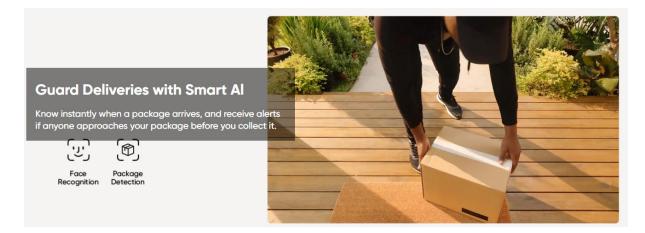
33. Each of the Accused '240 Eufy Products, alone or in combination with the Eufy Security Application, includes memory storing instructions and at least one processor configured to execute the instructions to identify static areas from input images captured at a plurality of time points, wherein, in the static areas, the input images include motion indicating a value smaller than a threshold value.

34. Each of the Accused '240 Eufy Products, alone or in combination with the Eufy Security Application, also generate a first image using the static areas of respective input images captured in a first time span from a processing time point, a second image using the static areas of respective input images captured in a second time span from the processing time point, and a third

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 11 of 86 PageID #: 11

image using the static areas of respective input images captured in a third time span from the processing time point. Further, each of the Accused '240 Eufy Products, alone or in combination with the Eufy Security Application, compare the first image and the second image and identify an area having a difference and classify static objects included in the input images according to a length of a static time period, based on a comparison of the first image, the second image, and the third image.

35. The following excerpts from eufy's websites provide non-limiting examples of the Accused '240 Eufy Products infringing at least claim 1 of the '240 Patent:



https://www.eufy.com/products/t8214111?ref=navimenu_2_3_1_1_copy&variant=42629004067 002.

Setting Up an Activity Zone for eufySecurity Devices

			1 people found this helpful!
✓Applicable for the second	nose products		
eufyCam 2 Pro	eufyCam 2C Pro	eufyCam 2	

To help you set up an activity zone for eufySecurity devices that record videos, such as eufyCams, doorbells, floodlight, wired cams and so on.

How to set up an activity zone?

1. Camera Settings> Motion Detection> Activity Zone> Click the \oplus icon.

2. The new zone appears in the middle of the screen. Turn your phone into landscape mode for a **full screen** of your camera's view. Make sure the screen rotation setting on your phone is already turned on.

3. Tap and drag the sides of the zones to **change its shape**. eufySecurity products include **rectangle** zone and **hexagon zone**.

4. Once you've given the Activity Zone the shape and location you want, tap the checkmark to save the zone.

If you set an Activity Zone, please ensure that the zone you have drawn **covers the entire area of interest**. Sometimes, users who set incomplete Activity Zones lead to eufySecurity devices missing motions.

https://support.eufy.com/s/article/Setting-Up-an-Activity-Zone-for-eufySecurity-Devices.

Delivery Guard User Guideline for eufy Video Doorbell Dual (Battery-Powered)

1 people found this helpful!

✓ Applicable for those products

Video Doorbell Dual 2K (Battery-Powered)

What is Delivery Guard?

Delivery Guard is a feature designed with our advanced AI technology to protect your packages. Whenever a package is delivered, you'll receive a notification. Plus, you can get pickup reminders throughout the day and be notified when someone approaches your package.

For the Best Experience

To ensure your packages are always detected, we recommend to do the following:

- 1. Focus on a small and clear area with the Porch View Camera. For the best result, make sure the field of view does not go past your porch line.
- 2. Ensure the porch has enough light, day and night.
- 3. Install the doorbell where the camera's view isn't blocked. We have included a 15° mounting wedge to help clear obstructions.
- 4. Set the activity zone to the usual package delivery area to avoid false detections.

2. Device Installation:

For best results, install the doorbell on a wall directly facing approaching visitors. This will keep the Porch View Camera and the door from causing blind spots.

If you're unable to do that, install the doorbell on a side wall and use the included 15° wedge to move the field of view.



If you're still experiencing difficulties, check if these situations might be causing the issue, then try reinstalling the doorbell in a more ideal spot.

Unsatisfied? Help Improve the Feature

It's annoying to not receive a package notification. That's why we want to improve this new technology. Anytime that you get a package that's not detected, take a picture or share a video so we can train our AI. You can do that right from the Events tab. With your help, we can train our AI to detect 100% of packages.

False Detections

Objects within the Porch View Camera's field of view can accidentally be detected as packages. If you have shoe boxes, carpets, slippers, stools, fire hydrants, flower pots, or leaves on your porch, it unfortunately may be accidentally detected.

You can remove the object out of the field of view or set an activity zone to exclude this object.

As mentioned, we are constantly refining the app. If you get an accidental detection, share a video or picture following the same process we just mentioned. Your feedback ensures we can eliminate faulty notifications.

Final Note

If you encounter problems with the accuracy of package detection, please contact eufy customer support and upload the videos to us, we will work on resolving these issues as soon as possible.

https://support.eufy.com/s/article/Delivery-Guard-User-Guideline-for-eufy-Video-Doorbell-Dual-Battery-Powered.

36. The foregoing features and capabilities of the Accused '240 Eufy Products and Defendants' description and/or demonstration thereof, including in user manuals and advertising, reflect Defendants' direct infringement by satisfying every element of at least claim 1 of the '240 Patent, under 35 U.S.C. § 271(a).

37. Defendants have indirectly infringed at least claim 1 of the '240 Patent in this judicial district and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the Accused '240 Eufy Products. Defendants' customers who purchase devices and components thereof and operate such devices and components in accordance with Defendants' instructions directly infringe one or more claims of the '240 Patent in violation of 35 U.S.C. § 271. Defendants instruct their customers through at least user manuals or websites, such as those located at: <u>https://support.eufy.com/s/;</u> https://community.security.eufy.com/t/unlock-the-power-of-eufy-delivery-guard-user-guideline-

fo-video-doorbell-dual/3419366;https://support.eufy.com/s/article/Delivery-Guard-User-Guideline-for-eufy-Video-Doorbell-Dual-Battery-Powered;

https://support.eufy.com/s/article/Motion-Detection-of-

eufyCams#:~:text=There%20are%20seven%20sensitivity%20levels,is%20set%20at%20level%2 04.

38. For example, as shown above, Defendants instruct their customers to use "Delivery Guard," stating "Delivery Guard is a feature designed with our advanced AI technology to protect your packages. Whenever a package is delivered, you'll receive a notification. Plus, you can get pickup reminders throughout the day and be notified when someone approaches your package." *See* <u>https://support.eufy.com/s/article/Delivery-Guard-User-Guideline-for-eufy-Video-Doorbell-Dual-Battery-Powered; *see also* <u>https://community.security.eufy.com/t/unlock-the-power-of-eufy-delivery-guard-user-guideline-fo-video-doorbell-dual/3419366;</u></u>

https://support.eufy.com/s/article/Motion-Detection-of-

eufyCams#:~:text=There%20are%20seven%20sensitivity%20levels,is%20set%20at%20level%2

39. Further, Defendants indirectly infringe by inducing and/or contributing to infringement by making available tutorial videos on their official YouTube channel encouraging customers to infringe by generating surveillance images for object detection functionality. *See* <u>https://www.youtube.com/channel/UC2MJc19aTAUJk7TrbPrMhEQ</u>.

40. Defendants are thereby liable for infringement of the '240 Patent pursuant to 35 U.S.C. § 271(b).

41. Defendants have indirectly infringed at least claim 1 of the '240 Patent by, among other things, contributing to the direct infringement of others, including customers of the

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 16 of 86 PageID #: 16

Accused '240 Eufy Products by making, offering to sell, or selling, in the United States, or importing a component of a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in infringement of the '240 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

42. For example, the Accused '240 Eufy Products include at least one component to generate surveillance images for object detection. This is a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such component is a material part of the invention and upon information and belief is not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Defendants are liable for infringement of the '240 Patent pursuant to 35 U.S.C. § 271(c).

43. Defendants have been on notice of the '240 Patent since at least June 3, 2024. By the time of trial, Defendants will thus have known and intended (since receiving such notice), that their continued actions would actively induce and contribute to actual infringement of at least claim 1 of the '240 Patent.

44. Defendants undertook and continue their infringing actions despite an objectively high likelihood that such activities infringed the '240 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since at least June 3, 2024, Defendants have been aware of an objectively high likelihood that their actions constituted and continue to constitute infringement of the '240 Patent, and that the '240 Patent is valid. On information and belief, Defendants cannot reasonably, subjectively believe that their actions do not constitute infringement of the '240 Patent, nor could they reasonably, subjectively believe that the patent is invalid. Despite that knowledge and subjective belief, and the objectively high likelihood that their actions constitute infringement, Defendants have continued their infringing activities. As such, Defendants willfully infringe the '240 Patent.

45. NEC has been damaged by Defendants' infringement of the '240 Patent.

COUNT 2 – INFRINGEMENT OF U.S. PATENT NO. 10,037,467

46. NEC incorporates paragraphs 1-45 above by reference.

47. The '467 Patent is directed to an image processing system for object detection. For example, the '467 Patent discloses a processor configured to detect and track an object in moving image data, and detect a plurality of object elements from the object, each of the object elements representing an element of the object set in advance and detectable from the object; extract a feature quantity of each of the object elements from a frame image constituting the moving image data; select the frame image satisfying a frame selection criterion for each of the object elements, the frame selection criterion being set in advance for each of the object elements; and associate frame specifying information for specifying the selected frame image with the feature quantity of the object element extracted from the selected frame image.

48. Prior to the '467 Patent, objects such as a person or a physical object could be detected from images captured by a camera for searching for a specific object using extracted feature quantity. '467 Patent at 1:22-32. These techniques, however, did not perform feature quantity extraction on objects other than a face and were susceptible to inaccurate detections. Thus, it was problematic to extract an appropriate feature quantity regarding a plurality of search objects and it may be impossible for precise search results. *Id.* at 1:58-65.

49. The '467 Patent solved these problems by providing improved information processing, which enables higher precision in search results regarding a searched object in a moving image. *Id.* at 3:36-40. More specifically, the claimed invention includes a processor

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 18 of 86 PageID #: 18

configured to detect and track an object in moving image data, and detect a plurality of object elements from the object, each of the object elements representing an element of the object set in advance and detectable from the object. As such, the claimed invention can extract a feature quantity of each of the object elements from a frame image constituting the moving image data and select the frame image satisfying a frame selection criterion for each of the object elements, the frame selection criterion being set in advance for each of the object elements. Further, the claimed information processing system can associate frame specifying information for specifying the selected frame image with the feature quantity of the object element extracted from the selected frame image. Therefore, an image processing system with improved object detection and/or search capability is achieved.

50. Defendants have directly infringed one or more claims of the '467 Patent in this District and elsewhere in Texas, including at least claim 1 literally and/or under the doctrine of equivalents, by or through its sale, offer for sale, manufacture, use, or import of its surveillance products with object detection functionality, including at least the 4G Camera S230 (1 Pack); 5-Piece Home Alarm Kit; eufy 4G LTE Cam S330; eufy 4G LTE Cam S330 (2-Cam Pack); eufy 4G LTE Cam S330 (3-Cam Pack); eufy 4G LTE Cam S330 (4-Cam Pack); eufy 4G LTE Cam S330 + Video Smart Lock S330; eufy 4G LTE Cam S330+Floodlight Camera E340; eufy 4G LTE Cam S330+Video Doorbell E340; eufy Pet Camera Pro N140; eufy Pet Dog Camera D605; eufy Security Indoor Cam C220; eufy Security SoloCam C210 with Solar Panel; eufyCam E330 (Professional) 4-Cam Kit; eufyCam S210 (eufyCam 2C); eufyCam S320 (eufyCam 3) 4-Cam Kit + 1 TB Hard Drive; Floodlight Cam S330; Floodlight Cam S330 (Renewed); Floodlight Camera E340; Garage-Control Cam E110; HomeBase S380 (HomeBase 3); Indoor and Entryway Standard

Bundle; Indoor Cam C120 (2K, Plug-In); Indoor Cam E220; Indoor Cam E220 (Renewed); Indoor Cam S350; Motion Sensor; Outdoor Cam E210; Outdoor Cam E220; Outdoor E Delux Bundle; Outdoor E Premium Bundle; Outdoor E Standard Bundle; Outdoor S Delux Business Bundle; Outdoor S Standard Bundle; Smart Drop S300; Solar Wall Light Cam S120; Solar Wall Light Cam S120 + Solar Panel Charger; Solar Wall Light Cam S120 (Renewed); SoloCam C120; SoloCam C210; SoloCam S220; SoloCam S220 (Renewed); SoloCam S230 (S40); SoloCam S230 (S40) (Renewed); SoloCam S340 (2-Cam Pack) + eufy 4G LTE Cam S330; SoloCam S340 + eufy 4G LTE Cam S330; SoloCam S340 Wireless Outdoor Security Camera with Dual Lens and Solar Panel; Video Doorbell (Wired) S330; Video Doorbell 2K (Wired); Video Doorbell C210; Video Doorbell E340 (Battery Powered); Video Doorbell E340 + Rechargeable Battery Pack with USB-C; Video Doorbell S220; Video Doorbell S220 Add-on; Video Doorbell S330; Video Doorbell S330 Add-on; Video Smart Lock E330; Video Smart Lock S330; Whole Protection E Delux Bundle; Whole Protection E Premium Business Bundle; Whole Protection E Standard Plus Bundle; Wired Wall Light Cam S100 (2-Cam Pack); eufy's BionicMind AI Service, eufy security application; and eufy servers supporting such products (collectively, "the Accused '467 Eufy Products"). NEC reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the Accused '467 Eufy Products are identified to describe the Defendants' infringement and in no way limit the discovery and infringement allegations against Defendants concerning other devices that incorporate the same or reasonably similar functionalities.

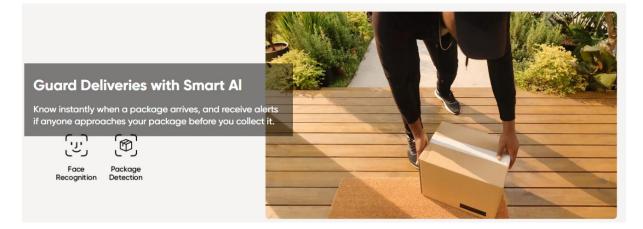
51. Each of the Accused '467 Eufy Products, alone or in combination with the Eufy Security Application, includes a processor configured to detect and track an object in moving

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 20 of 86 PageID #: 20

image data, and detect a plurality of object elements from the object, each of the object elements representing an element of the object set in advance and detectable from the object.

52. Each of the Accused '467 Eufy Products, alone or in combination with the Eufy Security Application, also extract a feature quantity of each of the object elements from a frame image constituting the moving image data. Further, each of the Accused '467 Eufy Products, alone or in combination with the Eufy Security Application, select the frame image satisfying a frame selection criterion for each of the object elements, the frame selection criterion being set in advance for each of the object elements; and associate frame specifying information for specifying the selected frame image with the feature quantity of the object element extracted from the selected frame image.

53. The following excerpts from eufy's websites provide non-limiting examples of the Accused '467 Eufy Products infringing at least claim 1 of the '467 Patent:



https://www.eufy.com/products/t8214111?ref=navimenu_2_3_1_1_copy&variant=42629004067 002.

Setting Up an Activity Zone for eufySecurity Devices

			1 people found this helpful!
✓Applicable for the second	nose products		
eufyCam 2 Pro	eufyCam 2C Pro	eufyCam 2	

To help you set up an activity zone for eufySecurity devices that record videos, such as eufyCams, doorbells, floodlight, wired cams and so on.

How to set up an activity zone?

1. Camera Settings> Motion Detection> Activity Zone> Click the \oplus icon.

2. The new zone appears in the middle of the screen. Turn your phone into landscape mode for a **full screen** of your camera's view. Make sure the screen rotation setting on your phone is already turned on.

3. Tap and drag the sides of the zones to **change its shape**. eufySecurity products include **rectangle** zone and **hexagon zone**.

4. Once you've given the Activity Zone the shape and location you want, tap the checkmark to save the zone.

If you set an Activity Zone, please ensure that the zone you have drawn **covers the entire area of interest**. Sometimes, users who set incomplete Activity Zones lead to eufySecurity devices missing motions.

https://support.eufy.com/s/article/Setting-Up-an-Activity-Zone-for-eufySecurity-Devices.

How does the Human Detection technology work?

Applicable for those products
 Garage-Control Cam Plus Garage-Control Cam

Human Detection technology is an intelligent system that detects and captures motion from moving targets for accurate object classification. The classified object is being tracked for in-depth analysis and the technology focuses on detecting human beings.

Human Detection technology works in two steps:

1. When the camera detects motion in its field of view, the AI engine analyzes the figure to determine if it is a human being or not.

2. If the captured face meets the AI engine's analysis parameters, the AI engine will try to capture the face and then send a notification to the user.

If there are any other questions regarding the Human Detection technology, please contact eufy customer support for assistance.

https://support.eufy.com/s/article/How-does-the-Human-Detection-technology-work.

Setting Up Notifications on Your Phone for eufySecurity Devices

			1 people found this helpful!
\checkmark Applicable for th	ose products		
eufyCam 2 Pro	eufyCam 2C Pro	eufyCam 2	

To make sure you can receive notifications from the eufySecurity app, please enable the below permissions settings. If you can get notifications, please ignore this guide.

Set Up Notifications

1. Add eufySecurity to unmonitored/whitelist apps

Go to phone **Device Management > Battery > Unmonitored apps > Add apps > Select and add eufySecurity**. Different phone models may have varying settings, please note this step is to make sure the app does not go into sleep mode on your phone.

2. Allow Notification

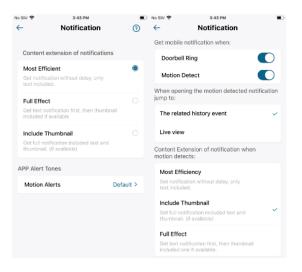
Go to phone settings > Notifications > Allow eufySecurity to enable notification. Or you can go to eufySecurity app > side menu > Settings > App Permissions > Notifications > Turn on switch/Allow Notifications.

3. Enable Push Notification for Security Mode

Please go to eufySecurity app > Security Mode > Select Camera/Sensor Name > Home/Away > Security Mode Settings > Push Notification.

Set Different Notification Type

No matter how different your security device is, you will see "Notification" in camera/doorbell settings in the App. Click the Notification and you will see the Notification contents extension or App alert Tones. For doorbells, there are two more parts: the scenario to receive notification and the corresponding video/Live View when clicking the notification. Let's see the details according to the App UI page:



2. App Alert Tones

- Motion Alerts: When Motion is detected, your phone will receive a notification with tone. Adjust the tones according
 to your preference.
- Ring Alerts (doorbell only): When someone drops by and presses the doorbell, your phone will receive a notification
 only for ring alerts.

3. Get Mobile Notification when (doorbell only)

- Doorbell Ring: You will receive a doorbell ring notification on your phone when you enable this function.
- Motion Detect: You will receive a motion detection notification on your phone when you enable this function.
- 4. When Opening the motion detected notification jump to (doorbell only)
- The related history event: Once you tap the notification, you will jump to watch the history event when you choose this function.
- Live View: Once you tap the notification, you will jump to see the Live view page when you choose this function.

https://support.eufy.com/s/article/Setting-Up-Notifications-on-Your-Phone-for-eufySecurity-Devices.

Al Features for eufySecurity Devices

			1 people found this helpful!
✓Applicable for the second	nose products		
eufyCam 2 Pro	eufyCam 2C Pro	eufyCam 2	

With the embedded AI chip, we can provide you with a local, safe, and intelligent detection experience. The AI feature includes Human Detection, Facial Detection, Pet Detection, and Crying Detection. The AI engine is built into the hardware, not in the cloud.

The Meaning of AI Feature

Human Detection: Al systems will try to detect objects similar to the human shape and filter out other objects like cars and animals for motion alerts.

Facial Detection: AI system will try to detect and screen faces shown in the video image.

Facial (Human) Recognition: Al system tries to recognize faces in the video image and identify the person for you.

Pet Detection: The AI system will try to detect pets which appear in the video image.

Crying Detection: The AI system will try to detect crying and will notify you if necessary.

Vehicle Detection: The AI system will catch up with the user's vehicle in the backyard or driveway. It can only detect the running vehicle to reduce too many detections because of the parking vehicle.

https://support.eufy.com/s/article/AI-Features-for-eufySecurity-Devices#:~:text=Vehicle%20Detection%3A%20The%20AI%20system,because%20of%20the% 20parking%20vehicle.

54. The foregoing features and capabilities of the Accused '467 Eufy Products and Defendants' description and/or demonstration thereof, including in user manuals and advertising, reflect Defendants' direct infringement by satisfying every element of at least claim 1 of the '467 Patent, under 35 U.S.C. § 271(a).

55. Defendants have indirectly infringed at least claim 1 of the '467 Patent in this judicial district and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the Accused '467 Eufy Products. Defendants' customers who purchase devices and components thereof and operate such devices

and components in accordance with Defendants' instructions directly infringe one or more claims of the '467 Patent in violation of 35 U.S.C. § 271. Defendants instruct their customers through at least user manuals or websites, such as those located at: <u>https://support.eufy.com/s/;</u> <u>https://community.security.eufy.com/t/unlock-the-power-of-eufy-delivery-guard-user-guidelinefo-video-doorbell-dual/3419366; https://support.eufy.com/s/article/Setting-Up-Notifications-on-Your-Phone-for-eufySecurity-Devices; https://support.eufy.com/s/article/How-does-the-Human-Detection-technology-work; https://support.eufy.com/s/article/Setting-Up-an-Activity-Zone-foreufySecurity-Devices; https://support.eufy.com/s/article/AI-Features-for-eufySecurity-Devices#:~:text=Vehicle%20Detection%3A%20The%20AI%20system,because%20of%20the% 20parking%20vehicle.</u>

56. For example, as shown above, Defendants instruct their customers to use "AI Feature" for object detection, stating "With the embedded AI chip, we can provide you with a local, safe, and intelligent detection experience. The AI feature includes Human Detection, Facial Recognition, Facial Detection, Pet Detection, and Crying Detection. The AI engine is built into the hardware, not in the cloud." *See* <u>https://support.eufy.com/s/article/AI-Features-for-eufySecurity-</u>

Devices#:~:text=Vehicle%20Detection%3A%20The%20AI%20system,because%20of%20the% 20parking%20vehicle; *see also* https://community.security.eufy.com/t/unlock-the-power-of-eufydelivery-guard-user-guideline-fo-video-doorbell-dual/3419366;

https://support.eufy.com/s/article/Setting-Up-Notifications-on-Your-Phone-for-eufySecurity-Devices.

57. Further, Defendants indirectly infringe by inducing and/or contributing to infringement by making available tutorial videos on their official YouTube channel encouraging

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 26 of 86 PageID #: 26

customers to infringe by generating surveillance images for object detection functionality. *See* <u>https://www.youtube.com/channel/UC2MJc19aTAUJk7TrbPrMhEQ</u>.

58. Defendants are thereby liable for infringement of the '467 Patent pursuant to 35U.S.C. § 271(b).

59. Defendants have indirectly infringed at least claim 1 of the '467 Patent by, among other things, contributing to the direct infringement of others, including customers of the Accused '467 Eufy Products by making, offering to sell, or selling, in the United States, or importing a component of a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in infringement of the '467 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

60. For example, the Accused '467 Eufy Products include at least one component to generate surveillance images for object detection. This is a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such component is a material part of the invention and upon information and belief is not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Defendants are liable for infringement of the '467 Patent pursuant to 35 U.S.C. § 271(c).

61. Defendants have been on notice of the '467 Patent since at least June 3, 2024. By the time of trial, Defendants will thus have known and intended (since receiving such notice), that their continued actions would actively induce and contribute to actual infringement of at least claim 1 of the '467 Patent.

62. Defendants undertook and continue their infringing actions despite an objectively high likelihood that such activities infringed the '467 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since at least June 3, 2024, Defendants have been

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 27 of 86 PageID #: 27

aware of an objectively high likelihood that their actions constituted and continue to constitute infringement of the '467 Patent, and that the '467 Patent is valid. On information and belief, Defendants cannot reasonably, subjectively believe that their actions do not constitute infringement of the '467 Patent, nor could they reasonably, subjectively believe that the patent is invalid. Despite that knowledge and subjective belief, and the objectively high likelihood that their actions constitute infringement, Defendants have continued their infringing activities. As such, Defendants willfully infringe the '467 Patent.

63. NEC has been damaged by Defendants' infringement of the '467 Patent.

COUNT 3 – INFRINGEMENT OF U.S. PATENT NO. 10,970,995

64. NEC incorporates paragraphs 1-63 above by reference.

65. The '995 Patent is directed to monitoring events in surveillance systems. For example, the '995 Patent discloses a control method comprising detecting that an event occurred in a surveillance area by using sensor data, identifying a type of the detected event, and controlling a predetermined imaging range of a camera depending on the identified type of the detected event in the surveillance area.

66. Prior to the '995 Patent, surveillance systems were used for event detection, particularly for capturing events within a surveillance area. '995 Patent at 1:19-23. However, in some situations, surveillance cameras could not adequately cover a detected event that extended beyond the surveillance. By only capturing a portion, the full event could not be understood. *Id.* at 1:24-29.

67. The '995 Patent solved these problems by providing an improved surveillance system that captures abnormal events within a surveillance area and appropriately sizes the surveillance image to capture the abnormal event. *Id.* at 1:30-37. More specifically, the claimed invention includes memory and a processor configured to detect that an event occurred in a

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 28 of 86 PageID #: 28

surveillance area by using sensor data, identify the type of detected event, and control a predetermined imaging range of a camera depending on the identified type of detected event. Therefore, a surveillance system with improved event detection and imaging range is achieved.

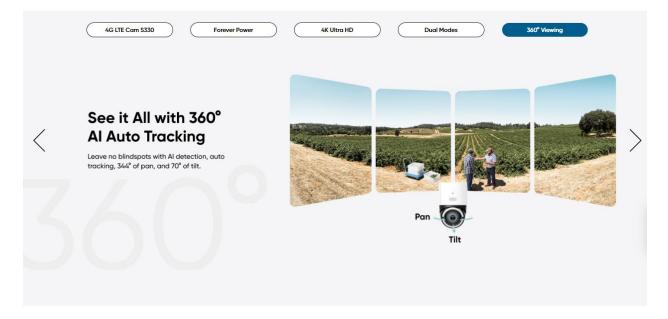
68. Defendants have directly infringed one or more claims of the '995 Patent in this District and elsewhere in Texas, including at least claim 6 literally and/or under the doctrine of equivalents, by or through its sale, offer for sale, manufacture, use, or import of its surveillance products with object detection with imaging range adjustment functionality, including at least the eufy 4G LTE Cam S330; eufy 4G LTE Cam S330 (2-Cam Pack); eufy 4G LTE Cam S330 (3-Cam Pack); eufy 4G LTE Cam S330 (4-Cam Pack); eufy 4G LTE Cam S330 + Video Smart Lock S330; eufy 4G LTE Cam S330+Floodlight Camera E340; eufy 4G LTE Cam S330+Video Doorbell E340; eufy Pet Camera Pro N140; eufy Pet Dog Camera D605; eufy Security Indoor Cam C220; Floodlight Cam S330; Floodlight Cam S330 (Renewed); Floodlight Camera E340; Indoor and Entryway Standard Bundle; Indoor Cam E220; Indoor Cam E220 (Renewed); Indoor Cam S350; Outdoor E Delux Bundle; Outdoor E Premium Bundle; Outdoor E Standard Bundle; Outdoor S Delux Business Bundle; Outdoor S Standard Bundle; SoloCam S340 (2-Cam Pack) + eufy 4G LTE Cam S330; SoloCam S340 + eufy 4G LTE Cam S330; SoloCam S340 Wireless Outdoor Security Camera with Dual Lens and Solar Panel; Whole Protection E Delux Bundle; and ; eufy's BionicMind AI Service, eufy security application; and eufy servers supporting such products (collectively, "the Accused '995 Eufy Products"). NEC reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the Accused '995 Eufy Products are identified to describe the Defendants' infringement and in no way limit the discovery and infringement allegations against Defendants concerning other devices that incorporate the same or reasonably similar functionalities.

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 29 of 86 PageID #: 29

69. Each of the Accused '995 Eufy Products, alone or in combination with the Eufy Security Application, forms a control system including at least one memory and at least one processor configured to detect that an event occurred in a surveillance area by using sensor data, identify a type of the detected event, and control a predetermined imaging range of a camera depending on the identified type of the detected event in the surveillance image area.

70. Within each of the Accused '995 Eufy Products, alone or in combination with the Eufy Security Application, the varieties of imaging ranges, including the imaging varieties of types, including the type, correspond to each other and the varieties of the imaging ranges are defined differently depending on the type.

71. The following excerpts from eufy's websites provide non-limiting examples of the Accused '995 Eufy Products infringing at least claim 6 of the '995 Patent:



Enhanced Security with AI Detection

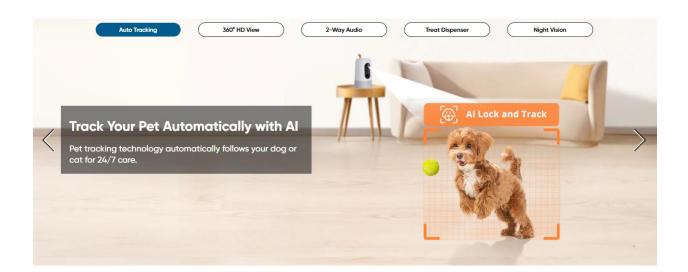
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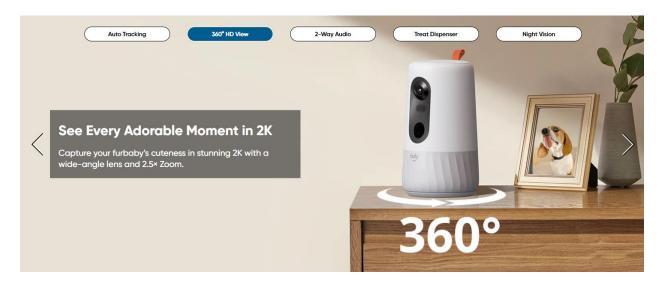
Automatic tracking functions work together seamlessly with Al movement, human, and vehicle detection to provide you with complete coverage of your property or business.



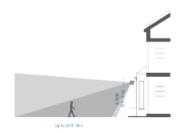
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https://www.eufy.com/products/t86p2121?utm_source=google&utm_medium=pmax&utm_cont ent=4gcam&utm_campaign=us_security_pro_consideration_pmax_4gcam_S330_purchase_web _M3_240524_PRG00021CAMP00108&utm_term=21322075127__&gad_source=1&gclid=Cj wKCAjw74e1BhBnEiwAbqOAjA7WUqgIEJMybyjXxge-6SH1RWbItu_WFrrvlzjZoUjzPD_UXXbiRoCxsgQAvD_BwE&variant=43152752083130.





https://support.eufy.com/s/article/Introducing-eufy-Pet-Dog-Camera-D605.



To ensure that no detection is missed, do not install the camera directly facing the monitoring area. Instead, maintain an angle to avoid any potential blind spots.



https://ankertechnologycompanyltd.my.salesforce.com/sfc/p/#5g000004DkWQ/a/J1000000XeFS/q7175VIBm9QnNgTrUXRT2Qzf7DY7yCc_Ovp0MjEktog.

Harnessing the Power of Smart A.I. Tracking in the eufy Security App

1 people found this helpful!

✓Applicable for those products

Indoor Cam S350

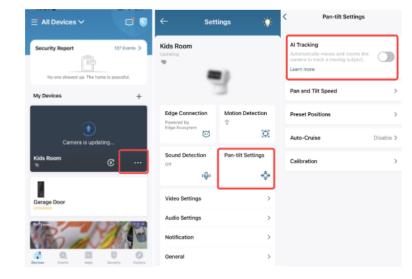
Certain eufy Security devices are equipped with a cutting-edge technology known as the Smart A.I. Tracking function. This Al-powered target-tracking method is designed to enhance your surveillance experience by ensuring that your target always remains within the camera's field of view.



The Smart A.I. Tracking function works by adjusting the position of the camera in real-time to keep up with the movement of the target. This function is particularly useful in situations where you need to clearly and completely capture the entire process of an event, such as monitoring the activities of a pet or tracking the movement of an intruder.

It's important to note that the A.I. Tracking function is disabled by default. To enable this function, simply follow the steps below:

- 1. Go to 'Camera Settings'
- 2. Select 'Pan & Tilt Settings'
- 3. Enable 'AI Tracking'

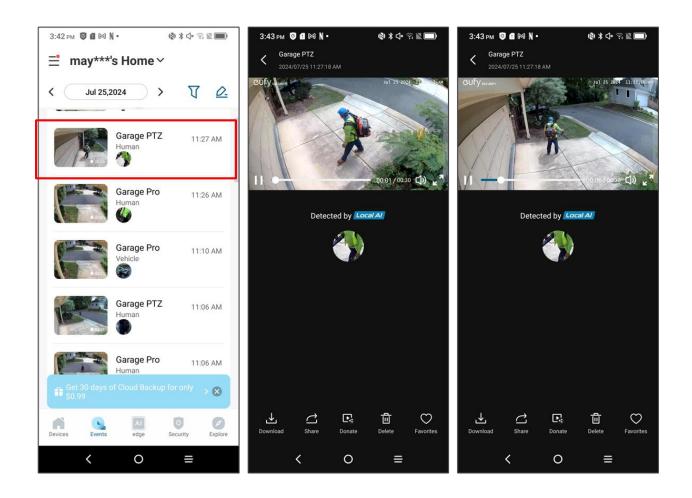


By enabling the Smart A.I. Tracking function, you can take full advantage of the camera's advanced capabilities, ensuring that you never miss a moment of what's happening in your monitored areas.

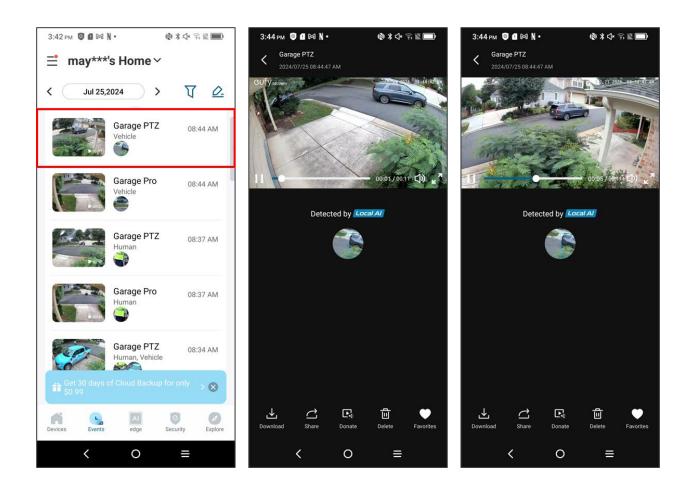
If you have any other questions, please don't hesitate to reach out to eufy support engineers for further assistance.

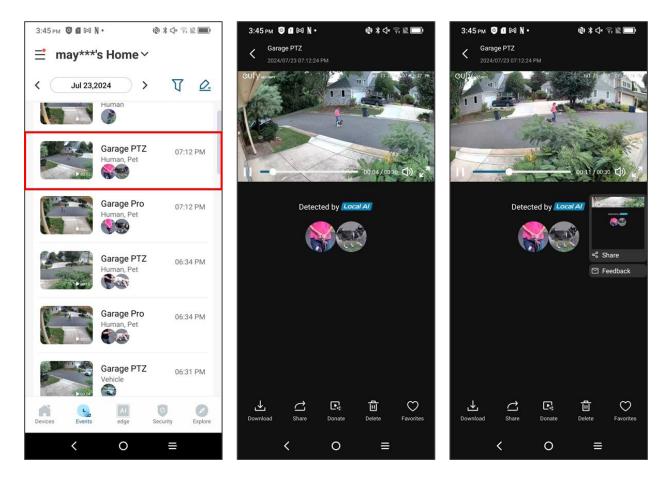
https://support.eufy.com/s/article/Harnessing-the-Power-of-Smart-A-I-Tracking-in-the-eufy-Security-App.

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 34 of 86 PageID #: 34



Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 35 of 86 PageID #: 35





Screenshots from a device using the Eufy Security Application showing the detection and tracking of a human, vehicle, and pet, respectively.

72. The foregoing features and capabilities of the Accused '995 Eufy Products and Defendants' description and/or demonstration thereof, including in user manuals and advertising, reflect Defendants' direct infringement by satisfying every element of at least claim 6 of the '995 Patent, under 35 U.S.C. § 271(a).

73. Defendants have indirectly infringed at least claim 6 of the '995 Patent in this judicial district and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the Accused '995 Eufy Products. Defendants' customers who purchase devices and components thereof and operate such devices and components in accordance with Defendants' instructions directly infringe one or more claims of the '995 Patent in violation of 35 U.S.C. § 271. Defendants instruct their customers through at

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 37 of 86 PageID #: 37

least user manuals or websites, such as those located at: <u>https://support.eufy.com/s/;</u> <u>https://ankertechnologycompanyltd.my.salesforce.com/sfc/p/#5g000004DkWQ/a/J1000000XeFS</u> /q7175VIBm9QnNgTrUXRT2Qzf7DY7yCc_Ovp0MjEktog;

https://support.eufy.com/s/product/a085g0000050UFEAA2/4g-lte-cam-s330;

https://support.eufy.com/s/article/Harnessing-the-Power-of-Smart-A-I-Tracking-in-the-eufy-Security-App.

74. For example, as shown above, Defendants instruct their customers to use "Smart A.I. Tracking" for event detection, stating "This AI-powered target-tracking method is designed to enhance your surveillance experience by ensuring that your target always remains within the camera's field of view. The Smart A.I. Tracking function works by adjusting the position of the camera in real-time to keep up with the movement of the target. This function is particularly useful in situations where you need to capture more details of an event, such as monitoring the activities of intruder." a tracking the movement of See pet or an https://support.eufy.com/s/article/Harnessing-the-Power-of-Smart-A-I-Tracking-in-the-eufy-Security-App.

75. Further, Defendants indirectly infringe by inducing and/or contributing to infringement by making available tutorial videos on their official YouTube channel encouraging customers to infringe by performing adjustments to the position of the camera in real-time to keep up with the movement of the target object functionality. *See* <u>https://www.youtube.com/channel/UC2MJc19aTAUJk7TrbPrMhEQ</u>.

76. Defendants are thereby liable for infringement of the '995 Patent pursuant to 35U.S.C. § 271(b).

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 38 of 86 PageID #: 38

77. Defendants have indirectly infringed at least claim 6 of the '995 Patent by, among other things, contributing to the direct infringement of others, including customers of the Accused '995 Eufy Products by making, offering to sell, or selling, in the United States, or importing a component of a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in infringement of the '995 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

78. For example, the Accused '995 Eufy Products include at least one component to adjusting the position of the camera in real-time and at different camera ranges based on detected event and/or target object. This is a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such component is a material part of the invention and upon information and belief is not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Defendants are liable for infringement of the '995 Patent pursuant to 35 U.S.C. § 271(c).

79. Defendants have been on notice of the '995 Patent since at least June 3, 2024. By the time of trial, Defendants will thus have known and intended (since receiving such notice), that their continued actions would actively induce and contribute to actual infringement of at least claim 6 of the '995 Patent.

80. Defendants undertook and continue their infringing actions despite an objectively high likelihood that such activities infringed the '995 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since at least June 3, 2024, Defendants have been aware of an objectively high likelihood that their actions constituted and continue to constitute infringement of the '995 Patent, and that the '995 Patent is valid. On information and belief, Defendants cannot reasonably, subjectively believe that their actions do not constitute

infringement of the '995 Patent, nor could they reasonably, subjectively believe that the patent is invalid. Despite that knowledge and subjective belief, and the objectively high likelihood that their actions constitute infringement, Defendants have continued their infringing activities. As such, Defendants willfully infringe the '995 Patent.

81. NEC has been damaged by Defendants' infringement of the '995 Patent.

COUNT 4 – INFRINGEMENT OF U.S. PATENT NO. 10,999,635

82. NEC incorporates paragraphs 1-81 above by reference.

83. The '635 Patent is directed to a display control system. For example, the '635 Patent discloses accepting input a plurality of videos captured by a plurality of video cameras; registering a plurality of persons appearing in the input plurality of videos; controlling a display device to display a first window and a plurality of tabs; and assigning the plurality of tabs to respective registered persons, wherein the first window includes: a first set of videos among the plurality of videos, the first set of videos being associated with a first assigned person; a first diagram in which information of time ranges when the plurality of video cameras each captured the first assigned person is shown with identifiers of the plurality of video cameras and a time axis; and a first tab including an image of the first assigned person; and wherein the first window is switchable by operation of the tabs to a second window including: a second set of videos among the plurality of videos, the second set of videos being associated with a second assigned person; a second diagram in which information of time ranges when the plurality of video cameras each captured the second assigned person is shown with the identifiers of the plurality of video cameras and the time axis, the second diagram which is associated with the second assigned person being different from the first diagram which is associated with the first assigned person; and a second tab including an image of the second assigned person.

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 40 of 86 PageID #: 40

84. The '635 Patent is directed to an improved system for personal surveillance. For example, prior to the '635 Patent, re-identification of a person being monitored across multiple cameras required human involvement. '635 Patent at 1:20-35. Alternatively, identifying a person based on similarities in person feature quantities between an appearing point and a vanishing point in a camera's field of view resulted in errors. *Id*.

85. The '635 Patent solved these problems by providing a new technique for image processing for cross-camera tracking of moving people. *Id.* at 1:46-51. More specifically, the claimed invention includes providing an input for accepting input video images captured by a plurality of video cameras; registering one or more persons appearing in the video images inputted from the input means; and a display for displaying switchable windows of the video images inputted from the video cameras for each person registered by the registering means. Therefore, the claimed display control system identified a target system more accurately when using multiple cameras.

86. Defendants have directly infringed one or more claims of the '635 Patent in this District and elsewhere in Texas, including at least claim 5 literally and/or under the doctrine of equivalents, by or through its sale, offer for sale, manufacture, use, or import of its surveillance products with cross-camera tracking functionality, including at least the eufy 4G LTE Cam S330 (2-Cam Pack); eufy 4G LTE Cam S330 (3-Cam Pack); eufy 4G LTE Cam S330 (4-Cam Pack); eufy 4G LTE Cam S330 + Video Smart Lock S330; eufy 4G LTE Cam S330+Floodlight Camera E340; eufy 4G LTE Cam S330+Video Doorbell E340; eufyCam E330 (Professional) 4-Cam Kit; eufyCam S210 (eufyCam 2C); eufyCam S220 (eufyCam 2C Pro); eufyCam S300 (eufyCam 3C) 3-Cam Kit+1 TB Drive; eufyCam S330 (eufyCam 3) 4-Cam Kit + 1 TB Hard Drive; Floodlight Camera E340; HomeBase S380 (HomeBase 3); Outdoor Cam E210; Outdoor Cam E220; Outdoor

S Standard Bundle; Solar Wall Light Cam S120; SoloCam S220; SoloCam S220 (Renewed); SoloCam S230 (S40); SoloCam S230 (S40) (Renewed); SoloCam S340 (2-Cam Pack) + eufy 4G LTE Cam S330; SoloCam S340 + eufy 4G LTE Cam S330; Video Doorbell E340 (Battery Powered); Video Doorbell E340 + Rechargeable Battery Pack with USB-C; Video Smart Lock E330; Video Smart Lock S330; Whole Protection E Delux Bundle; Wired Wall Light Cam S100 (2-Cam Pack); eufy's BionicMind AI Service; and eufy servers supporting such products (collectively, "the Accused '635 Eufy Products"). NEC reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the Accused '635 Eufy Products are identified to describe the Defendants' infringement and in no way limit the discovery and infringement allegations against Defendants concerning other devices that incorporate the same or reasonably similar functionalities.

87. Each of the Accused '635 Eufy Products, alone or in combination with the Eufy Security Application, performs a display control method. Further, each of the Accused '635 Eufy Products, alone or in combination with the Eufy Security Application, accepts input a plurality of videos captured by a plurality of video cameras; registers a plurality of persons appearing in the input plurality of videos; and controls a display device to display a first window and a plurality of tabs.

88. Each of the Accused '635 Eufy Products, alone or in combination with the Eufy Security Application, further assigns the plurality of tabs to respective registered persons. Further, the first window includes a first set of videos among the plurality of videos, the first set of videos being associated with a first assigned person; a first diagram in which information of time ranges when the plurality of video cameras each captured the first assigned person is shown with identifiers of the plurality of video cameras and a time axis; and a first tab including an image of

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 42 of 86 PageID #: 42

the first assigned person. Additionally, the first window is switchable by operation of the tabs to a second window including a second set of videos among the plurality of videos, the second set of videos being associated with a second assigned person; a second diagram in which information of time ranges when the plurality of video cameras each captured the second assigned person is shown with the identifiers of the plurality of video cameras and the time axis, the second diagram which is associated with the second assigned person being different from the first diagram which is associated with the first assigned person; and a second tab including an image of the second assigned person.

89. Defendants directly infringe by performing this method claim in the United States when, for example, performing testing, generating, and/or producing instructional videos showing how the accused products perform cross-camera tracking functionality. *See* <u>https://www.youtube.com/channel/UC2MJc19aTAUJk7TrbPrMhEQ</u>.

90. The following excerpts from eufy's websites provide non-limiting examples of the Accused '635 Eufy Products infringing at least claim 5 of the '635 Patent:

Dual Cameras Enhance Coverage

The front-facing camera focuses on people, while the downward-facing camera fills in the gaps with a view of the floor in front of your door.





Full Control of Your Video Doorbell with the eufy Security app



Instant Notifications*



Communicate from Anywhere Strike a two-way conversation with anyone at your

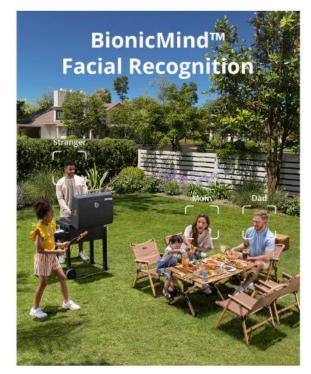


6 Quick Replies Save time and use Quick Replies to respond when you are away.



Works with Voice Assistants Supports Alexa and Google Voice Assistant to keep your hands free.

https://www.eufy.com/products/t8214111?ref=navimenu_2_3_1_1_copy&variant=42629004067_002_



BionicMind Recognition

BionicMind differentiates family and strangers with facial recognition. Accurate up to 99.9%.

Understand in a Glance

Get in-depth knowledge of your security in seconds with categorized events.

AI Ability

Self-learning Algorithm	Yes
Face Recognition	Yes
Human Detection	Yes
Vehicle Detection	Yes
Pet Detection	Yes

https://www.eufy.com/products/t80301d1?ref=navimenu_2_copy&fliter_category=alarmsystem&variant=41846278357178.

Introducing the Cross-Camera Tracking Function in the eufy Security App

1 people found this helpful!

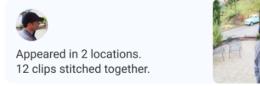
✓Applicable for those products

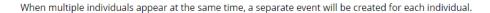
eufyCam E330 (Professional)

How does the Cross-Camera Tracking function work?

eufy utilizes BionicMind[™] A.I. to identify individuals captured on camera in each video. When the same individual appears across multiple cameras within a specified timeframe, the system automatically locates and merges these footage into a single video. This allows you to easily review the entire activity of that specific individual in a single video.

07:10 AM, seen a person activity.





08:30 AM, seen their appearing together.



Appeared in 2 locations. 12 clips stitched together.



Appeared in 2 locations. 12 clips stitched together.





When is the Cross-Camera Tracking function triggered?

Please note that different combinations of cameras will yield different experiences. Please refer to the following table for different scenarios.

User Case 1	Expected Experience	
All cameras support BionicMind™ A.I.	 An individual passes in front of each of the five cameras sequentially and then leaves. 	
Device Example	Once the recording from the last camera is complete, the security report will immediately display the stitched tracking video, thanks to real-time analytics.	
HomeBase 3 x1	 If you view the stitched video after a certain time period (such as 10 minutes), the real- 	
eufyCam x4	time stitching results can be automatically	
Battery Video Doorbell x1	corrected using look-back analytics.	
User Case 2	Expected Experience	
All cameras support BionicMind™ A.I.	1. An individual passes in front of each of the four cameras sequentially and then leaves.	
All are wired cameras	Once the recording from the last camera is	
Device Example	complete, the security report will immediately display the stitched tracking video, thanks to real-time analytics. 2. If you view the stitched video after a certai	
HomeBase 3 x1	 time period (such as 10 minutes), the real- time stitching results can be automatically 	
eufyCam Professional x4	corrected using look-back analytics.	

User Case 3	Expected Experience
All cameras can save video to the HomeBase 3, but they do not support BionicMind™ A.I.	 An individual passes in front of each of the four cameras sequentially and then leaves. Each camera generates a 20-second footage. Once the final camera finishes recording, a
Device Example	wait time of five to six minutes is required, after which the security report will display the compiled tracking video through look- back analysis.
HomeBase 3 x1	
Floodlight Cam 2 Pro x2	
Wired Wall Light Cam x2	
User Case 4	Expected Experience
Some cameras support BionicMind™ A.I. and other cameras do not support it.	 An individual passes in front of each of the six cameras sequentially and then leaves. Each camera generates a 20-second footage. Once the final camera finishes recording, a wait time of three minutes is required, after which the security report will display the
Device Example	compiled tracking video through look-back analysis.
HomeBase 3 x1 eufyCam x4 Floodlight Cam 2 Pro x2	Note: Although the footage from the four eufyCam cameras can be processed in real- time, the footage from the Floodlight Cam 2 Pro cameras need to be analyzed retrospectively, so
	it will take a few minutes for the stitched tracking video to appear.

When does the system process footage from the Cross-Camera Tracking function?

1. Real-Time Tracking

As each camera records, HomeBase 3 analyzes the video content and stitches it together in real-time. Once a video recording ends, it is immediately concatenated with the associated video recordings. You can instantly view the cross-camera tracking result on the security report page.

Note: Cameras that are compatible with HomeBase 3 storage as well as HomeBase 3 BionicMind[™] A.I. can utilize both the Real-Time and Look-Back Tracking functions. (Examples include eufyCam, Battery Video Doorbell, etc.) More detailed device compatibility information can be found in the following link: <u>https://support.eufy.com/s/article/Centralize-Your-Security-Ecosystem-with-HomeBase-3</u>

2. Look-Back Tracking

After each camera has finished recording and saving videos to HomeBase 3, HomeBase 3 re-analyzes the video content for splicing. HomeBase 3 performs this post-processing when it is idle (idle means there is no camera currently recording). A 30-second video usually takes 120 seconds to process (four times the duration of the video).

Note: Cameras that are compatible with HomeBase 3 storage, but not with HomeBase 3 BionicMind[™] A.I., will only be able to use the Look-Back Tracking function. (Examples include FloodLight Camera 2 Pro and Wall Light Camera, etc.) More detailed device compatibility information can be found in the following link: <u>https://support.eufy.com/s/article/Centralize-Your-Security-Ecosystem-with-HomeBase-3</u>

https://support.eufy.com/s/article/Introducing-the-Cross-Camera-Tracking-Function-in-the-eufy-Security-App.

Cross-Camera Tracking Function Compatibility

			1 people found this helpful!
✓Applicable for those	products		
Water and Freeze Sensor	Siren	4G LTE Cam S330	

In the world of technology, Cross-Camera Tracking is a feature that is gaining significant attention. This feature allows for the tracking of an object or person across multiple camera feeds, providing a seamless transition from one camera to another. It's a powerful tool that can be used in various sectors such as security, retail, and transportation.

Cross-Camera Tracking is a feature that is not universally compatible with all devices. It requires specific hardware and software capabilities to function effectively. Here, we will outline some of the devices that are compatible with this feature.

Finding the Part Number: The Part Number (PN) of any eufy Security device can be located on the product or within the eufy Security app. (Device Settings > General > About Device > The first five characters of the Serial Number)

Important: Please upgrade the HomeBase 3 to v3.3.2.0 or above, and upgrade the App to v4.7.2 or above, then enable the Cross-Camera Tracking feature. You can also contact eufy support engineers for further assistance.

Туре	Product Name	Product Number	Real-time cross-camera tracking	Look-back cross- camera tracking
	E330 eufyCam (Professional)	T8600	supported	supported
	S330 eufyCam (eufyCam 3)	T8160	supported	supported
	S300 eufyCam (eufyCam 3C)	T8161	supported	supported
eufyCam	eufyCam 2 Pro	T8140	supported	supported
	eufyCam 2C Pro	T8142	supported	supported
	eufyCam 2	T8114	supported	supported
	eufyCam 2C	T8113	supported	supported
	eufyCam E	T8112	supported	supported
	eufyCam	T8111	supported	supported

	Video Doorbell Dual	T8213	supported	supported
	Video Doorbell E340	T8214	supported	supported
	Video Doorbell 2K	T8210	supported	supported
Video Doorbell (with	S210 Video Doorbell (Battery Doorbell 2K)	T8212	supported	supported
battery)	Video Doorbell 1080p	T8222	supported	supported
	Video Doorbell 1080p (Slim)	T8220	supported	supported
	Video Doorbell 2E	T8221	supported	supported
Smart Lock	Video Smart Lock	T8530	supported	supported

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 51 of 86 PageID #: 51

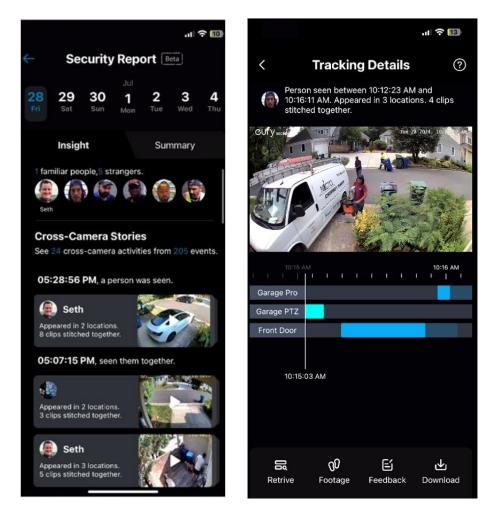
	SoloCam S340	T8170	supported	supported
SoloCam	SoloCam L20/S220 SoloCam/SoloCam L40/SoloCam S40/SoloCam S40	T8122/T8134/T8124/T8124V/T8123	supported	supported
	SoloCam E20	T8130	Evaluating	Evaluating
	SoloCam E40	T8131	Evaluating	Evaluating
Outdoor Cam	Outdoor Cam	T8442	Evaluating	supported (Beta)
	Outdoor Cam Pro	T8441	Evaluating	supported (Beta)
Wall Light Cam	S100 Kabelgebundene Wall Light Cam	T84A1	Evaluating	Evaluating
	Solar Wall Light Cam	T81A0	Evaluating	Evaluating

	1		1	
	Floodlight Cam 2K Pro	T8423	Evaluating	Evaluating
	Floodlight Cam E340	T8425	supported	supported
Floodlight Cam	Floodlight Cam 1080p	T8420X	Evaluating	Evaluating
	Floodlight Cam 2K	T8422	Evaluating	Evaluating
	Floodlight Cam 2K	T8424	Evaluating	Evaluating
Indoor Cam	Indoor Cam 2K	T8400	Evaluating	Evaluating
	Indoor Cam S350	T8416	supported	supported
	Indoor Cam 2K Pan & Tilt	T8410	Evaluating	Evaluating
	Indoor Cam 1080p	T8401	Evaluating	Evaluating
	Indoor Cam 1080p Pan & Tilt	T8411	Evaluating	Evaluating
	Indoor Cam Mini	T8414	Evaluating	Evaluating

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 52 of 86 PageID #: 52

Video Doorbell (Wired)	All wired model	T8200/T8203/T8201/T8202	Not supported	Not supported
Garage- Control Cam	All wired model	T8452/T8503	Not supported	Not supported
4G Cam	4G LTE Cam S330	T86P2	Not supported	Not supported
4G Cam	4G Starlight Cam S230	T8150	Not supported	Not supported
Alarm System	All Sensors/Keypad	T8900/T8910/T8960	Not supported	Not supported

https://support.eufy.com/s/article/Cross-Camera-Tracking-Function-Compatibility.



Exemplarily screenshots captured from a device using the Eufy Security Application to perform Cross-Camera Tracking functionality.

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 53 of 86 PageID #: 53

91. The foregoing features and capabilities of the Accused '635 Eufy Products and Defendants' description and/or demonstration thereof, including in user manuals and advertising, reflect Defendants' direct infringement by satisfying every element of at least claim 5 of the '635 Patent, under 35 U.S.C. § 271(a).

92. Defendants have indirectly infringed at least claim 5 of the '635 Patent in this judicial district and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the Accused '635 Eufy Products. Defendants' customers who purchase devices and components thereof and operate such devices and components in accordance with Defendants' instructions directly infringe one or more claims of the '635 Patent in violation of 35 U.S.C. § 271. Defendants instruct their customers through at least user manuals or websites, such as those located at: <u>https://support.eufy.com/s/article/Cross-Camera-Tracking-Function-Compatibility;</u>

https://support.eufy.com/s/article/Introducing-the-Cross-Camera-Tracking-Function-in-the-eufy-Security-App; https://support.eufy.com/s/article/Understanding-Factors-Influencing-the-Cross-Camera-Tracking-Function-in-the-eufy-Security-App; https://support.eufy.com/s/article/Tipsfor-Using-Cross-Camera-Tracking-Function.

93. For example, as shown above, Defendants instruct their customers that "eufy utilizes BionicMindTM A.I. to identify individuals captured on camera in each video. When the same individual appears across multiple cameras within a specified timeframe, the system automatically locates and merges these footage into a single video. This allows you to easily review the entire activity of that specific individual in a single video." See https://support.eufy.com/s/article/Introducing-the-Cross-Camera-Tracking-Function-in-the-eufy-Security-App: see also https://support.eufy.com/s/article/Cross-Camera-Tracking-FunctionCase 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 54 of 86 PageID #: 54

<u>Compatibility;</u> <u>https://support.eufy.com/s/article/Understanding-Factors-Influencing-the-Cross-</u> <u>Camera-Tracking-Function-in-the-eufy-Security-App;</u> <u>https://support.eufy.com/s/article/Tips-</u> <u>for-Using-Cross-Camera-Tracking-Function.</u>

94. Further, Defendants indirectly infringe by inducing and/or contributing to infringement by making available tutorial videos on their official YouTube channel encouraging customers to infringe by performing cross-camera tracking functionality. *See* https://www.youtube.com/channel/UC2MJc19aTAUJk7TrbPrMhEQ.

95. Defendants are thereby liable for infringement of the '635 Patent pursuant to 35 U.S.C. § 271(b).

96. Defendants have indirectly infringed at least claim 5 of the '635 Patent by, among other things, contributing to the direct infringement of others, including customers of the Accused '635 Eufy Products by making, offering to sell, or selling, in the United States, or importing a component of a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in infringement of the '635 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

97. For example, the Accused '635 Eufy Products include at least one component to generate images to be used in conjunction with the Eufy Security Application to perform cross-camera tracking functionality. This is a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such component is a material part of the invention and upon information and belief is not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Defendants are liable for infringement of the '635 Patent pursuant to 35 U.S.C. § 271(c).

98. Defendants have been on notice of the '635 Patent since at least June 3, 2024. By the time of trial, Defendants will thus have known and intended (since receiving such notice), that their continued actions would actively induce and contribute to actual infringement of at least claim 5 of the '635 Patent.

99. Defendants undertook and continue their infringing actions despite an objectively high likelihood that such activities infringed the '635 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since at least June 3, 2024, Defendants have been aware of an objectively high likelihood that their actions constituted and continue to constitute infringement of the '635 Patent, and that the '635 Patent is valid. On information and belief, Defendants cannot reasonably, subjectively believe that their actions do not constitute infringement of the '635 Patent, nor could they reasonably, subjectively believe that the patent is invalid. Despite that knowledge and subjective belief, and the objectively high likelihood that their actions constitute infringement, Defendants have continued their infringing activities. As such, Defendants willfully infringe the '635 Patent.

100. NEC has been damaged by Defendants' infringement of the '635 Patent.

COUNT 5 – INFRINGEMENT OF U.S. PATENT NO. 11,210,526

101. NEC incorporates paragraphs 1-100 above by reference.

102. The '526 Patent is directed to a video processing system for analyzing at least one video. For example, the '526 Patent discloses at least one memory storing a computer program and at least one processor configured to execute the computer program to control the video processing system to perform: detecting a first region corresponding to a predetermined category by analyzing the at least one video, the first region indicating the object; acquiring a second region esignated by an operator, the second region indicating a part of the object and being a part of the first region; generating a new category corresponding to the part of the object, the new category having a name

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 56 of 86 PageID #: 56

input by the operator, and the new category being different from the predetermined category; and accumulating, as learned data, video data of the second region, the second region corresponding to the name of the new category.

103. The '526 Patent is directed to a technique of analyzing video captured from a surveillance camera. For example, prior to the '526 Patent, there was a technique of obviating the need for previous knowledge and prior learning of a behavior recognition system by real-time learning. '526 Patent at 1:24-27. However, since behavior recognition was performed by machine learning predetermining behavior based on past observation of similar objects, discriminator learning in the course of operation could not be performed. *Id.* at 1:39-45. Thus, analytical accuracy could not be improved during the actual operation of the behavior analysis system. *Id.* at 1:45-47.

104. The '526 Patent solved these problems by providing an improved video processing apparatus with dynamic learning. *Id.* at 1:53-54. More specifically, the claimed invention includes a video analyzer that analyzes video data captured by a surveillance camera detecting an event belonging to a specific category and outputting a detection result and performs learning processing using the learning data obtained from category information set in accordance with an operation by a user. Therefore, the video analytical accuracy can be efficiently increased during actual operation of a surveillance system.

105. Defendants have directly infringed one or more claims of the '526 Patent in this District and elsewhere in Texas, including at least claim 1 literally and/or under the doctrine of equivalents, by or through its sale, offer for sale, manufacture, use, or import of its surveillance products with AI learning functionality, including at least the 4G Camera S230 (1 Pack); 5-Piece Home Alarm Kit; eufy 4G LTE Cam S330; eufy 4G LTE Cam S330 (2-Cam Pack); eufy 4G LTE

Cam S330 (3-Cam Pack); eufy 4G LTE Cam S330 (4-Cam Pack); eufy 4G LTE Cam S330 + Video Smart Lock S330; eufy 4G LTE Cam S330+Floodlight Camera E340; eufy 4G LTE Cam S330+Video Doorbell E340; eufy Pet Camera Pro N140; eufy Pet Dog Camera D605; eufy Security Indoor Cam C220; eufy Security SoloCam C210 with Solar Panel; eufyCam E330 (Professional) 4-Cam Kit; eufyCam S210 (eufyCam 2C); eufyCam S220 (eufyCam 2C Pro); eufyCam S300 (eufyCam 3C) 3-Cam Kit+1 TB Drive; eufyCam S330 (eufyCam 3) 4-Cam Kit + 1 TB Hard Drive; Floodlight Cam S330; Floodlight Cam S330 (Renewed); Floodlight Camera E340; Garage-Control Cam E110; HomeBase S380 (HomeBase 3); Indoor and Entryway Standard Bundle; Indoor Cam C120 (2K, Plug-In); Indoor Cam E220; Indoor Cam E220 (Renewed); Indoor Cam S350; Motion Sensor; Outdoor Cam E210; Outdoor Cam E220; Outdoor E Delux Bundle; Outdoor E Premium Bundle; Outdoor E Standard Bundle; Outdoor S Delux Business Bundle; Outdoor S Standard Bundle; Smart Drop S300; Solar Wall Light Cam S120; Solar Wall Light Cam S120 + Solar Panel Charger; Solar Wall Light Cam S120 (Renewed); SoloCam C120; SoloCam C210; SoloCam S220; SoloCam S220 (Renewed); SoloCam S230 (S40); SoloCam S230 (S40) (Renewed); SoloCam S340 (2-Cam Pack) + eufy 4G LTE Cam S330; SoloCam S340 + eufy 4G LTE Cam S330; SoloCam S340 Wireless Outdoor Security Camera with Dual Lens and Solar Panel; Video Doorbell (Wired) S330; Video Doorbell 2K (Wired); Video Doorbell C210; Video Doorbell E340 (Battery Powered); Video Doorbell E340 + Rechargeable Battery Pack with USB-C; Video Doorbell S220; Video Doorbell S220 Add-on; Video Doorbell S330; Video Doorbell S330 Add-on; Video Smart Lock E330; Video Smart Lock S330; Whole Protection E Delux Bundle; Whole Protection E Premium Business Bundle; Whole Protection E Standard Plus Bundle; Wired Wall Light Cam S100 (2-Cam Pack); eufy's BionicMind AI Service; eufy security application; and eufy servers supporting such products (collectively, "the Accused '526 Eufy

Products"). NEC reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the Accused '526 Eufy Products are identified to describe the Defendants' infringement and in no way limit the discovery and infringement allegations against Defendants concerning other devices that incorporate the same or reasonably similar functionalities.

106. Each of the Accused '526 Eufy Products, alone or in combination with the Eufy Security Application, includes a video processing system for analyzing at least one video including an object. Further, each of the Accused '526 Eufy Products, alone or in combination with the Eufy Security Application, includes at least one memory storing a computer program and at least one processor configured to execute the computer program to control the video processing system to detect a first region corresponding to a predetermined category by analyzing the at least one video, the first region indicating the object; acquire a second region designated by an operator, the second region indicating a part of the object, the new category having a name input by the operator, and the new category being different from the predetermined category; and accumulate, as learning data, video data of the second region, the second region corresponding to the name of the new category.

107. The following excerpts from eufy's websites provide non-limiting examples of the Accused '526 Eufy Products infringing at least claim 1 of the '526 Patent:

Dual Cameras Enhance Coverage

The front-facing camera focuses on people, while the downward-facing camera fills in the gaps with a view of the floor in front of your door.





Full Control of Your Video Doorbell with the eufy Security app



Instant Notifications*



Communicate from Anywhere Strike a two-way conversation with anyone at your

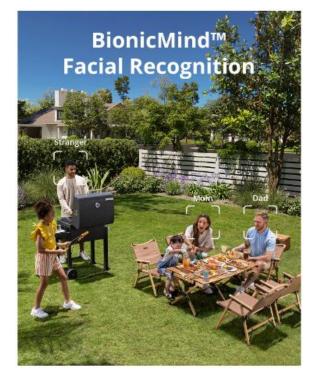


6 Quick Replies Save time and use Quick Replies to respond when you are away.



Works with Voice Assistants Supports Alexa and Google Voice Assistant to keep your hands free.

https://www.eufy.com/products/t8214111?ref=navimenu_2_3_1_1_copy&variant=42629004067_002_



BionicMind Recognition

BionicMind differentiates family and strangers with facial recognition. Accurate up to 99.9%.

Understand in a Glance

Get in-depth knowledge of your security in seconds with categorized events.

AI Ability

Self-learning Algorithm	Yes
Face Recognition	Yes
Human Detection	Yes
Vehicle Detection	Yes
Pet Detection	Yes

https://www.eufy.com/products/t80301d1?ref=navimenu_2_copy&fliter_category=alarm-system&variant=41846278357178.

AI Features for eufySecurity Devices

			1 people found this helpful!
✓Applicable for th	ose products		
eufyCam 2 Pro	eufyCam 2C Pro	eufyCam 2	

With the embedded AI chip, we can provide you with a local, safe, and intelligent detection experience. The AI feature includes Human Detection, Facial Detection, Pet Detection, and Crying Detection. The AI engine is built into the hardware, not in the cloud.

The Meaning of AI Feature

Human Detection: Al systems will try to detect objects similar to the human shape and filter out other objects like cars and animals for motion alerts.

Facial Detection: Al system will try to detect and screen faces shown in the video image.

Facial (Human) Recognition: Al system tries to recognize faces in the video image and identify the person for you.

Pet Detection: The AI system will try to detect pets which appear in the video image.

Crying Detection: The AI system will try to detect crying and will notify you if necessary.

Vehicle Detection: The AI system will catch up with the user's vehicle in the backyard or driveway. It can only detect the running vehicle to reduce too many detections because of the parking vehicle.

https://support.eufy.com/s/article/AI-Features-for-eufySecurity-Devices.

Harnessing the Power of Smart A.I. Tracking in the eufy Security App

1 people found this helpful!

✓Applicable for those products

Indoor Cam 5350

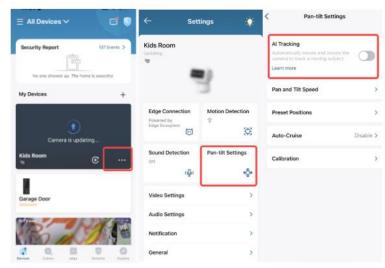
Certain eufy Security devices are equipped with a cutting-edge technology known as the Smart A.I. Tracking function. This Al-powered target-tracking method is designed to enhance your surveillance experience by ensuring that your target always remains within the camera's field of view.



The Smart A.I. Tracking function works by adjusting the position of the camera in real-time to keep up with the movement of the target. This function is particularly useful in situations where you need to clearly and completely capture the entire process of an event, such as monitoring the activities of a pet or tracking the movement of an intruder.

It's important to note that the A.I. Tracking function is disabled by default. To enable this function, simply follow the steps below:

- 1. Go to 'Camera Settings'
- 2. Select 'Pan & Tilt Settings'
- 3. Enable 'AI Tracking'



By enabling the Smart A.I. Tracking function, you can take full advantage of the camera's advanced capabilities, ensuring that you never miss a moment of what's happening in your monitored areas.

https://support.eufy.com/s/article/Harnessing-the-Power-of-Smart-A-I-Tracking-in-the-eufy-Security-App.

How to Donate Recorded Videos on eufySecurity Video Devices

			1 people found this helpful!
✓Applicable for the second	nose products		
eufyCam 2 Pro	eufyCam 2C Pro	eufyCam 2	

How to Donate Recorded Videos?

Customers have the ability to donate recorded videos to serve the following purposes:

- Share your fun videos and exciting eufy experiences.
- Provide further information for eufy Customer Support to resolve issues you are encountering, such as picture quality or audio issues.

Please follow the steps below to donate your videos to eufy.

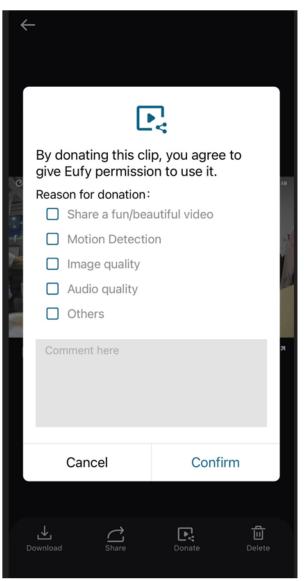
Step 1) Launch eufySecurity app on your smartphone or tablet.

Step 2) Select the **Events** tab.

Step 3) Select a specific video that you want to donate.

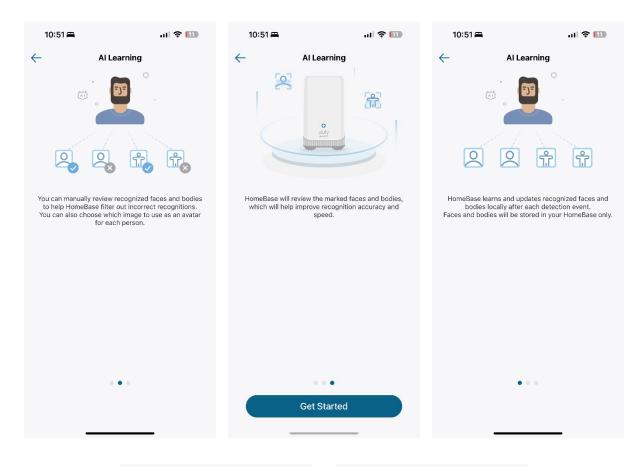
Step 4) Select the **Donate** button.

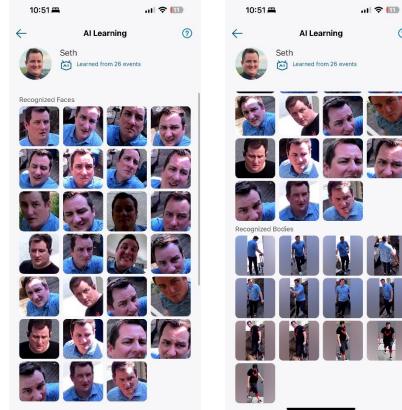
Step 5) Fill out your reasons for donating the video and select the Confirm button to donate your video.

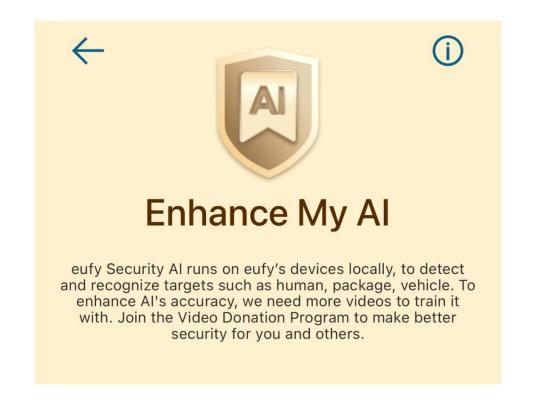


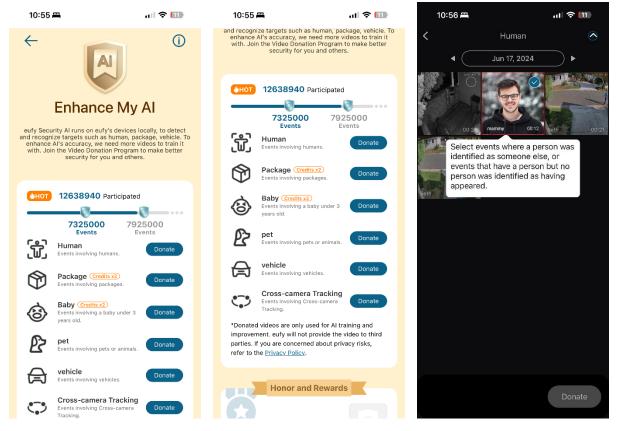
https://support.eufy.com/s/article/How-to-Donate-Recorded-Videos-on-eufySecurity-Video-Devices.

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 66 of 86 PageID #: 66









Exemplarily screenshots captured from a device using the Eufy Security Application to perform "Enhance My AI" functionality.

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 68 of 86 PageID #: 68

108. The foregoing features and capabilities of the Accused '526 Eufy Products and Defendants' description and/or demonstration thereof, including in user manuals and advertising, reflect Defendants' direct infringement by satisfying every element of at least claim 1 of the '526 Patent, under 35 U.S.C. § 271(a).

109. Defendants have indirectly infringed at least claim 1 of the '526 Patent in this judicial district and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the Accused '526 Eufy Products. Defendants' customers who purchase devices and components thereof and operate such devices and components in accordance with Defendants' instructions directly infringe one or more claims of the '526 Patent in violation of 35 U.S.C. § 271. Defendants instruct their customers through at least user manuals or websites, such as those located at: https://support.eufy.com/s/article/AI-Features-for-eufySecurity-Devices;

https://support.eufy.com/s/article/How-to-Donate-Recorded-Videos-on-eufySecurity-Video-Devices; https://support.eufy.com/s/article/Harnessing-the-Power-of-Smart-A-I-Tracking-in-theeufy-Security-App; https://support.myeufy.com.au/support/solutions/articles/73000597074-whatis-the-self-learning-ai-in-homebase-3-.

110. For example, as shown above, Defendants instruct their customers that "eufy Security AI runs on eufy's devices locally, to detect and recognize targets such as human, package, vehicle. To enhance AI's accuracy, we need more videos to train it with. Join the Video Donation Program to make better security for you and others." *See* <u>https://support.eufy.com/s/article/How-to-Donate-Recorded-Videos-on-eufySecurity-Video-Devices;</u>

https://support.eufy.com/s/article/AI-Features-for-eufySecurity-Devices;

https://support.eufy.com/s/article/Harnessing-the-Power-of-Smart-A-I-Tracking-in-the-eufy-

<u>Security-App;</u> <u>https://support.myeufy.com.au/support/solutions/articles/73000597074-what-is-</u> the-self-learning-ai-in-homebase-3-.

111. Further, Defendants indirectly infringe by inducing and/or contributing to infringement by making available tutorial videos on their official YouTube channel encouraging customers to infringe by generating AI training through the eufy "Video Donation Program" functionality. *See* <u>https://www.youtube.com/channel/UC2MJc19aTAUJk7TrbPrMhEQ</u>.

112. Defendants are thereby liable for infringement of the '526 Patent pursuant to 35 U.S.C. § 271(b).

113. Defendants have indirectly infringed at least claim 1 of the '526 Patent by, among other things, contributing to the direct infringement of others, including customers of the Accused '526 Eufy Products by making, offering to sell, or selling, in the United States, or importing a component of a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in infringement of the '526 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

114. For example, the Accused '526 Eufy Products include at least one component to generate images to be used in conjunction with the Eufy Security Application to perform AI training through the eufy "Video Donation Program." This is a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such component is a material part of the invention and upon information and belief is not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Defendants are liable for infringement of the '526 Patent pursuant to 35 U.S.C. § 271(c).

115. Defendants have been on notice of the '526 Patent since at least June 3, 2024. By the time of trial, Defendants will thus have known and intended (since receiving such notice), that

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 70 of 86 PageID #: 70

their continued actions would actively induce and contribute to actual infringement of at least claim 1 of the '526 Patent.

116. Defendants undertook and continue their infringing actions despite an objectively high likelihood that such activities infringed the '526 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since at least June 3, 2024, Defendants have been aware of an objectively high likelihood that their actions constituted and continue to constitute infringement of the '526 Patent, and that the '526 Patent is valid. On information and belief, Defendants cannot reasonably, subjectively believe that their actions do not constitute infringement of the '526 Patent, nor could they reasonably, subjectively believe that the patent is invalid. Despite that knowledge and subjective belief, and the objectively high likelihood that their actions constitute infringement, Defendants have continued their infringing activities. As such, Defendants willfully infringe the '526 Patent.

117. NEC has been damaged by Defendants' infringement of the '526 Patent.

<u>COUNT 6 – INFRINGEMENT OF U.S. PATENT NO. 11,537,814</u>

118. NEC incorporates paragraphs 1-117 above by reference.

119. The '814 Patent is directed to a data providing system. For example, the '814 Patent discloses a data providing system comprising an identification unit that identifies an object indicated by data by applying the data to a model learned by machine learning, a determination unit that determines whether or not the data is transmission target data to be transmitted to a predetermined computer based on a result obtained by applying the data to the model, and a data transmission unit that transmits the data determined to be the transmission target data to the predetermined computer at a predetermined timing.

120. The '814 Patent is directed to a system, for easily collecting data that can contribute to the generation of a model with high identification accuracy. For example, prior to the '814

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 71 of 86 PageID #: 71

Patent, a camera may capture various appearances of the same object such as cars traveling in one direction (*i.e.*, from right to left) but little opportunity to capture cars traveling in the opposite direction (*i.e.*, from left to right). '814 Patent at 2:2-7. In this example, many images from right to left are obtained, but few of the car traveling in the opposite direction are obtained. Thus, the training data is skewed in one direction, which results in higher accuracy of identification for one direction over the other. *Id.* at 2:7-23.

121. The '814 Patent solved these problems by providing an improved data providing system with machine learning. *Id.* at 2:31-41. More specifically, the claimed invention includes a identification unit that identifies an object indicated by data by applying the data to a model learned by machine learning, determining whether or not the data is transmission target data to be transmitted to a predetermined computer based on a result obtained by applying the data to the model, transmitting the data to the predetermined computer, and displaying a button for inputting a data transmission instruction and an index value indicating identification accuracy of the model. Therefore, a model with increased identification accuracy is achieved.

122. Defendants have directly infringed one or more claims of the '814 Patent in this District and elsewhere in Texas, including at least claim 1 literally and/or under the doctrine of equivalents, by or through its sale, offer for sale, manufacture, use, or import of its surveillance products with AI learning functionality, including at least the 4G Camera S230 (1 Pack); 5-Piece Home Alarm Kit; eufy 4G LTE Cam S330; eufy 4G LTE Cam S330 (2-Cam Pack); eufy 4G LTE Cam S330 (3-Cam Pack); eufy 4G LTE Cam S330 (4-Cam Pack); eufy 4G LTE Cam S330 + Video Smart Lock S330; eufy 4G LTE Cam S330+Floodlight Camera E340; eufy 4G LTE Cam S330+Video Doorbell E340; eufy Pet Camera Pro N140; eufy Pet Dog Camera D605; eufy Security Indoor Cam C220; eufy Security SoloCam C210 with Solar Panel; eufyCam E330

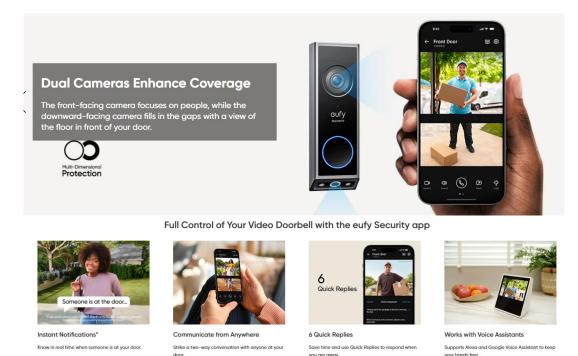
(Professional) 4-Cam Kit; eufyCam S210 (eufyCam 2C); eufyCam S220 (eufyCam 2C Pro); eufyCam S300 (eufyCam 3C) 3-Cam Kit+1 TB Drive; eufyCam S330 (eufyCam 3) 4-Cam Kit + 1 TB Hard Drive; Floodlight Cam S330; Floodlight Cam S330 (Renewed); Floodlight Camera E340; Garage-Control Cam E110; HomeBase S380 (HomeBase 3); Indoor and Entryway Standard Bundle; Indoor Cam C120 (2K, Plug-In); Indoor Cam E220; Indoor Cam E220 (Renewed); Indoor Cam S350; Motion Sensor; Outdoor Cam E210; Outdoor Cam E220; Outdoor E Delux Bundle; Outdoor E Premium Bundle; Outdoor E Standard Bundle; Outdoor S Delux Business Bundle; Outdoor S Standard Bundle; Smart Drop S300; Solar Wall Light Cam S120; Solar Wall Light Cam S120 + Solar Panel Charger; Solar Wall Light Cam S120 (Renewed); SoloCam C120; SoloCam C210; SoloCam S220; SoloCam S220 (Renewed); SoloCam S230 (S40); SoloCam S230 (S40) (Renewed); SoloCam S340 (2-Cam Pack) + eufy 4G LTE Cam S330; SoloCam S340 + eufy 4G LTE Cam S330; SoloCam S340 Wireless Outdoor Security Camera with Dual Lens and Solar Panel; Video Doorbell (Wired) S330; Video Doorbell 2K (Wired); Video Doorbell C210; Video Doorbell E340 (Battery Powered); Video Doorbell E340 + Rechargeable Battery Pack with USB-C; Video Doorbell S220; Video Doorbell S220 Add-on; Video Doorbell S330; Video Doorbell S330 Add-on; Video Smart Lock E330; Video Smart Lock S330; Whole Protection E Delux Bundle; Whole Protection E Premium Business Bundle; Whole Protection E Standard Plus Bundle; Wired Wall Light Cam S100 (2-Cam Pack); eufy's BionicMind AI Service; eufy security application; and eufy servers supporting such products (collectively, "the Accused '814 Eufy Products"). NEC reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the Accused '814 Eufy Products are identified to describe the Defendants' infringement and in no way limit the discovery and

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 73 of 86 PageID #: 73

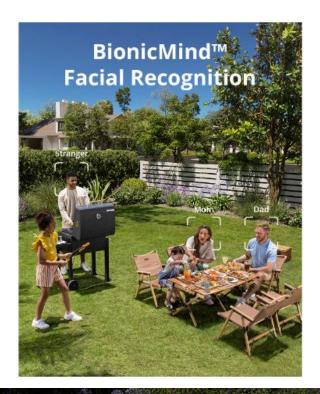
infringement allegations against Defendants concerning other devices that incorporate the same or reasonably similar functionalities.

123. Each of the Accused '814 Eufy Products, alone or in combination with the Eufy Security Application, creates a data providing system. Further, each of the Accused '814 Eufy Products, alone or in combination with the Eufy Security Application, includes an identification unit that identifies an object indicated by data by applying the data to a model learned by machine learning; a determination unit that determines whether or not the data is transmission target data to be transmitted to a predetermined computer based on a result obtained by applying the data to the model; and a data transmission unit that transmits the data determined to be the transmission target data to the predetermined computer at a predetermined timing.

124. The following excerpts from eufy's websites provide non-limiting examples of the Accused '814 Eufy Products infringing at least claim 1 of the '814 Patent:



https://www.eufy.com/products/t8214111?ref=navimenu_2_3_1_1_copy&variant=42629004067_002_



BionicMind Recognition

BionicMind differentiates family and strangers with facial recognition. Accurate up to 99.9%.

Understand in a Glance

Get in-depth knowledge of your security in seconds with categorized events.

https://www.eufy.com/products/t80301d1?ref=navimenu_2_copy&fliter_category=alarmsystem&variant=41846278357178.

AI Features for eufySecurity Devices

			1 people found this helpful!
✓Applicable for th	ose products		
eufyCam 2 Pro	eufyCam 2C Pro	eufyCam 2	

With the embedded AI chip, we can provide you with a local, safe, and intelligent detection experience. The AI feature includes Human Detection, Facial Detection, Pet Detection, and Crying Detection. The AI engine is built into the hardware, not in the cloud.

The Meaning of AI Feature

Human Detection: Al systems will try to detect objects similar to the human shape and filter out other objects like cars and animals for motion alerts.

Facial Detection: AI system will try to detect and screen faces shown in the video image.

Facial (Human) Recognition: Al system tries to recognize faces in the video image and identify the person for you.

Pet Detection: The AI system will try to detect pets which appear in the video image.

Crying Detection: The AI system will try to detect crying and will notify you if necessary.

Vehicle Detection: The AI system will catch up with the user's vehicle in the backyard or driveway. It can only detect the running vehicle to reduce too many detections because of the parking vehicle.

https://support.eufy.com/s/article/AI-Features-for-eufySecurity-Devices.

Harnessing the Power of Smart A.I. Tracking in the eufy Security App

1 people found this helpful!

✓Applicable for those products

Indoor Cam 5350

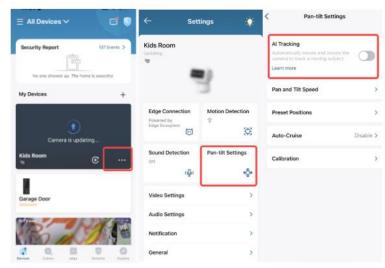
Certain eufy Security devices are equipped with a cutting-edge technology known as the Smart A.I. Tracking function. This Al-powered target-tracking method is designed to enhance your surveillance experience by ensuring that your target always remains within the camera's field of view.



The Smart A.I. Tracking function works by adjusting the position of the camera in real-time to keep up with the movement of the target. This function is particularly useful in situations where you need to clearly and completely capture the entire process of an event, such as monitoring the activities of a pet or tracking the movement of an intruder.

It's important to note that the A.I. Tracking function is disabled by default. To enable this function, simply follow the steps below:

- 1. Go to 'Camera Settings'
- 2. Select 'Pan & Tilt Settings'
- 3. Enable 'AI Tracking'



By enabling the Smart A.I. Tracking function, you can take full advantage of the camera's advanced capabilities, ensuring that you never miss a moment of what's happening in your monitored areas.

<u>https://support.eufy.com/s/article/Harnessing-the-Power-of-Smart-A-I-Tracking-in-the-eufy-Security-App</u>.

There Is a Delay When Receiving eufySecurity Pop up Notifications

			1 people found this helpful!
∽Applicable for those products			
eufyCam 2 Pro	eufyCam 2C Pro	eufyCam 2	

There are four steps to receive notifications. It has to successfully finish all four steps before a notification is pushed to your phone.

Step One: eufySecurity device detects an event (motion/human);

Step Two: eufySecurity device sends the event to the eufySecurity app;

Step Three: eufySecurity app sends the event to Apple/Google server;

Step Four: Apple/Google server sends the notification to your phone;

The notification delay usually happens at step 4, but there are many external factors that might cause a delay, such as Apple's APNS server, phone's network and so on.

If possible, please try the following tips:

1. Share your security device with others and see how notification works on their phone. Learn more about Share Your eufySecurity Devices With Your Family.

2. Check the upload speed of your WiFi network. Please test and make sure your upload speed is at least 50kb/s.

3. Exit the app completely and press the doorbell button to see if you can receive timely notifications.

4. Please check your phone's settings and see whether the eufySecurity app was added to the **power-saving whitelist**, which may affect the running of the app in the background. (This is only on Android phones. Samsung customers can learn how to add an app to the whitelist by clicking here.)

5. Please go to Notification (Doorbell Settings) in App > Select "**Most efficiency**" or "Full effect" mode instead of "Include Thumbnail".

https://support.eufy.com/s/article/There-Is-a-Delay-When-Receiving-eufySecurity-Pop-up-Notifications.

Setting Up Notifications on Your Phone for eufySecurity Devices

		1 people found this helpful!
✓Applicable for those	products	
eufyCam 2 Pro	eufyCam 2C Pro	eufyCam 2

To make sure you can receive notifications from the eufySecurity app, please enable the below permissions settings. If you can get notifications, please ignore this guide.

Set Up Notifications

1. Add eufySecurity to unmonitored/whitelist apps

Go to phone **Device Management > Battery > Unmonitored apps > Add apps > Select and add eufySecurity**. Different phone models may have varying settings, please note this step is to make sure the app does not go into sleep mode on your phone.

2. Allow Notification

Go to phone settings > Notifications > Allow eufySecurity to enable notification. Or you can go to eufySecurity app > side menu > Settings > App Permissions > Notifications > Turn on switch/Allow Notifications.

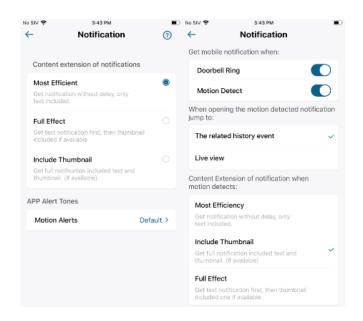
3. Enable Push Notification for Security Mode

Please go to eufySecurity app > Security Mode > Select Camera/Sensor Name > Home/Away > Security Mode Settings > Push Notification.

Set Different Notification Type

No matter how different your security device is, you will see "Notification" in camera/doorbell settings in the App. Click the Notification and you will see the Notification contents extension or App alert Tones. For doorbells, there are two more parts: the scenario to receive notification and the corresponding video/Live View when clicking the notification. Let's see the details according to the App UI page:

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 80 of 86 PageID #: 80



- 1. Content Extension of Notifications
- Most Efficiency: You will get notifications on your phone without delay as it only concludes text.



• Include Thumbnail: Get full notification including text and thumbnail if the thumbnail is available.



• Full Effect: Get text notification first, then the thumbnail includes one if available.

https://support.eufy.com/s/article/Setting-Up-Notifications-on-Your-Phone-for-eufySecurity-Devices.

What does the interval time setting do?

The interval time is the time between event notification and recording, which can be adjusted between 0 to 5 minutes.

https://support.eufy.com/s/article/eufy-Indoor-Cam-2K-FAQ#:~:text=The%20interval%20time%20is%20the,between%200%20to%205%20minutes.

10:07	•1	I 🗢 👫			
<	Notification				
Select the detection	Select the detection you want to be notified:				
🕆 Human					
Vehicle					
Pet					
M All other r	notion				
Interval time (mi Interval time betw and recording	ns) veen event notific				
• • • • • • • • • • • • • • • • • • •	2 3	4 5			
Content extension of notification					
Most Efficient Get notification with					
included if available Note: In this mode, fo					

Screenshot of device using the Eufy Security Application to set the "Interval time (mins) between event notification and recording."

125. The foregoing features and capabilities of the Accused '814 Eufy Products and Defendants' description and/or demonstration thereof, including in user manuals and advertising, reflect Defendants' direct infringement by satisfying every element of at least claim 1 of the '814 Patent, under 35 U.S.C. § 271(a).

126. Defendants have indirectly infringed at least claim 1 of the '814 Patent in this judicial district and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the Accused '814 Eufy Products.

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 82 of 86 PageID #: 82

Defendants' customers who purchase devices and components thereof and operate such devices and components in accordance with Defendants' instructions directly infringe one or more claims of the '814 Patent in violation of 35 U.S.C. § 271. Defendants instruct their customers through at least user manuals or websites, such as those located at: <u>https://support.eufy.com/s/article/AI-Features-for-eufySecurity-Devices;</u>

https://support.eufy.com/s/article/Setting-Up-Notifications-on-Your-Phone-for-eufySecurity-Devices; https://support.eufy.com/s/article/There-Is-a-Delay-When-Receiving-eufySecurity-Popup-Notifications.

127. For example, as shown above, Defendants instruct their customers that "eufy Security AI runs on eufy's devices locally, to detect and recognize targets such as human, package, vehicle." *See* <u>https://support.eufy.com/s/article/How-to-Donate-Recorded-Videos-on-eufySecurity-Video-Devices</u>. Additionally, Defendants instruct customers to adjust the interval time setting to change "the interval time...between event notification and recording, which can be adjusted between 0 to 5 minutes." *See* <u>https://support.eufy.com/s/article/eufy.Indoor-Cam-2K-FAQ#:~:text=The%20interval%20time%20is%20the,between%200%20to%205%20minutes; *see also* <u>https://support.eufy.com/s/article/There-Is-a-Delay-When-Receiving-eufySecurity-Pop-up-Notifications;</u> <u>https://support.eufy.com/s/article/Setting-Up-Notifications-on-Your-Phone-for-eufySecurity-Devices</u>.</u>

128. Further, Defendants indirectly infringe by inducing and/or contributing to infringement by making available tutorial videos on their official YouTube channel encouraging customers to infringe by performing identification of an object using AI and send a notification of the same through the Eufy Security Application functionality. *See* <u>https://www.youtube.com/channel/UC2MJc19aTAUJk7TrbPrMhEQ</u>.

82

Case 2:24-cv-00720-JRG Document 1 Filed 09/03/24 Page 83 of 86 PageID #: 83

129. Defendants are thereby liable for infringement of the '814 Patent pursuant to 35U.S.C. § 271(b).

130. Defendants have indirectly infringed at least claim 1 of the '814 Patent by, among other things, contributing to the direct infringement of others, including customers of the Accused '814 Eufy Products by making, offering to sell, or selling, in the United States, or importing a component of a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in infringement of the '814 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

131. For example, the Accused '814 Eufy Products include at least one component to identify an object using AI and send a notification of the same through the Eufy Security Application. This is a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such component is a material part of the invention and upon information and belief is not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Defendants are liable for infringement of the '814 Patent pursuant to 35 U.S.C. § 271(c).

132. Defendants have been on notice of the '814 Patent since at least the filing of this Complaint. By the time of trial, Defendants will thus have known and intended (since receiving such notice), that their continued actions would actively induce and contribute to actual infringement of at least claim 1 of the '814 Patent.

133. Defendants undertook and continue their infringing actions despite an objectively high likelihood that such activities infringed the '814 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since at least the filing of this Complaint, Defendants have been aware of an objectively high likelihood that their actions constituted and continue to

83

constitute infringement of the '814 Patent, and that the '814 Patent is valid. On information and belief, Defendants cannot reasonably, subjectively believe that their actions do not constitute infringement of the '814 Patent, nor could they reasonably, subjectively believe that the patent is invalid. Despite that knowledge and subjective belief, and the objectively high likelihood that their actions constitute infringement, Defendants have continued their infringing activities. As such, Defendants willfully infringe the '814 Patent.

134. NEC has been damaged by Defendants' infringement of the '814 Patent.

DAMAGES

As a result of Defendants' acts of infringement, NEC has suffered actual and consequential damages. To the fullest extent permitted by law, NEC seeks recovery of damages at least in the form of reasonable royalties.

NOTICE

NEC has complied with the notice requirement of 35 U.S.C. § 287. In addition, Defendants have had actual knowledge of the '240, '467, '995, '635, and '526 Patents and their infringement thereof at least as of receipt of the NEC notice letter identified in this Complaint.

JURY DEMAND

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, NEC demands a trial by jury on all issues triable as such.

PRAYER FOR RELIEF

WHEREFORE, NEC demands judgment for itself and against Anker as follows:

 A. An adjudication that Defendants have infringed one or more claims of the Asserted Patents, literally and/or under the doctrine of equivalents;

- B. An adjudication that Defendants have indirectly infringed one or more claims of the Asserted Patents, literally and/or under the doctrine of equivalents;
- C. An award of damages to be paid by Defendants adequate to compensate Plaintiff for Defendants' past infringement of the Asserted Patents, and any continuing or future infringement through the date such judgment is entered, including interest, costs, expenses and an accounting of all infringing acts including, but not limited to, those acts not presented at trial;
- D. An award related to any other equitable relief which may be requested and to which Plaintiff is entitled;
- E. A declaration that this case is exceptional under 35 U.S.C. § 285;
- F. An award of Plaintiff's reasonable attorneys' fees;
- G. A declaration that Defendants' acts of infringement were willful;
- H. An award of enhanced damages against Defendants pursuant to 35 U.S.C. § 284; and
- I. An award to Plaintiff of such further relief at law or in equity as the Court deems just and proper.

Dated: September 3, 2024

Respectfully submitted,

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