

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

MONUMENT PEAK VENTURES, LLC,	§	
Plaintiff,	§	
	§	NO. 6:23-CV-750-ADA
v.	§	
	§	
TESLA, INC.,	§	JURY TRIAL
Defendant.	§	
	§	

FIRST AMENDED COMPLAINT AND JURY DEMAND

Monument Peak Ventures, LLC alleges the following for its First Amended Complaint for patent infringement against Tesla, Inc.:

THE PARTIES

1. Plaintiff, Monument Peak Ventures, LLC, is a Texas Limited Liability Company with its principal place of business in Allen, Texas.

2. On information and belief, Defendant Tesla, Inc. is a corporation organized and operating under the laws of Delaware with its principal place of business at 1 Tesla Road, Austin, Texas 78725.

3. Tesla, Inc. was served with process through its registered agent, the Corporation Trust Company, 1999 Bryan Street, Suite 900, Dallas, Texas 75201-3136.

4. Tesla manufactures, sells, and offers for sale in the United States

automobiles, including Tesla Models S, 3, X, and Y, that infringe MPV's patent claims.

5. Tesla markets, offers for sale, and sells the infringing automobiles throughout the United States including within this district.

JURISDICTION AND VENUE

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

7. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1400(b) because Tesla resides in this district, maintains its headquarters in this district, does business in this district, has committed acts of infringement in this district, and has purposely sought and transacted business in this district involving the accused products.

MONUMENT PEAK VENTURES

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

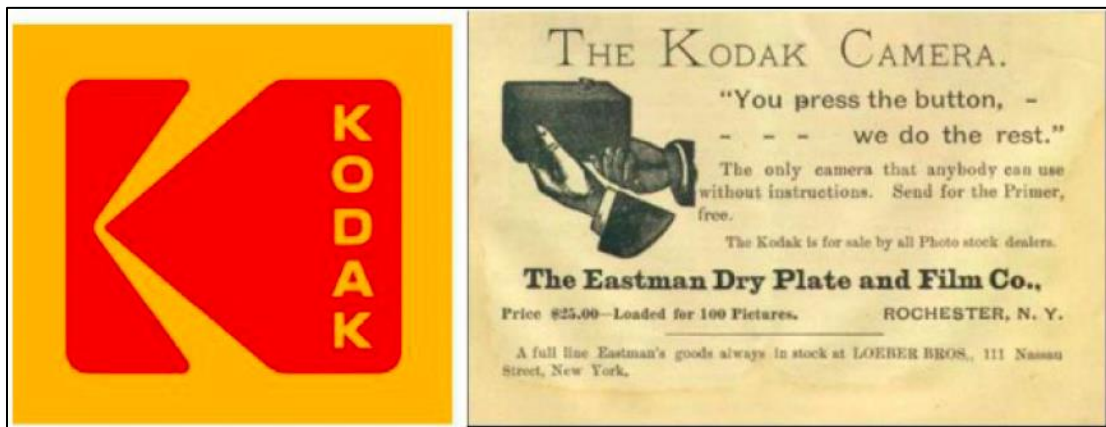
9. MPV asserts that Tesla infringes, directly and indirectly, U.S. Patent

Nos. 7,035,461 (the “’461 Patent”); 7,062,085 (the “’085 Patent”); 7,233,684 (the “’684 Patent”); 7,418,116 (the “’116 Patent”); 7,860,320 (the “’320 Patent”); 8,836,784 (the “’784 Patent”); and 8,665,345 (the “’345 Patent”) (collectively, the “MPV Asserted Patents”).

ASSERTED MPV PATENTS

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

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



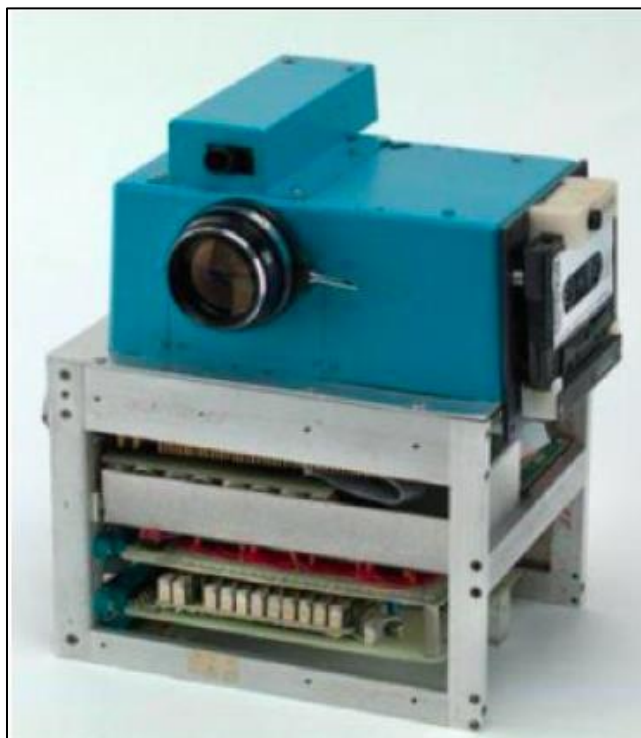
12. In 1935 Kodak introduced “Kodachrome,” a color reversal stock for movie and slide film.

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



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

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



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

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

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

19. As part of a reorganization of its business, Kodak sold many of its patents to some of the biggest names in technology including Google, Facebook, Amazon, Microsoft, Samsung, Adobe Systems, HTC and others for \$525,000,000.

20. While scores of companies have paid to license the Kodak patent portfolio owned by MPV, Tesla has refused to recognize MPV's patents and license the inventions that it has profited from.

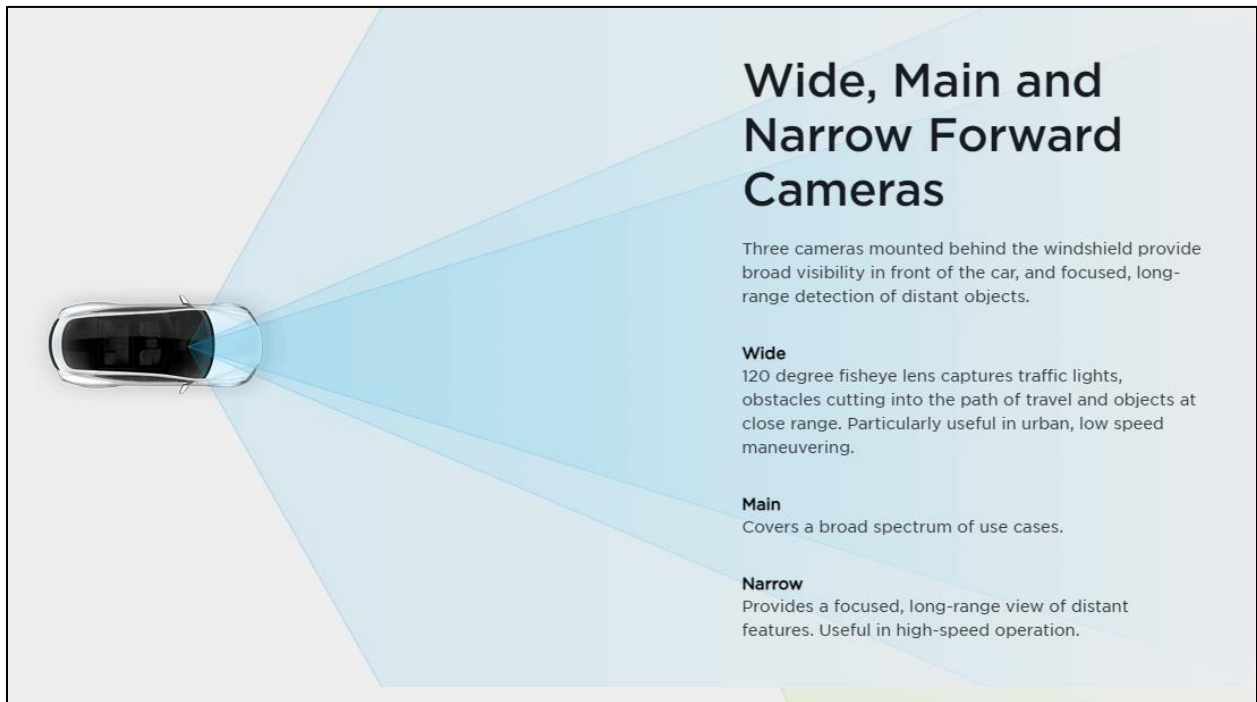
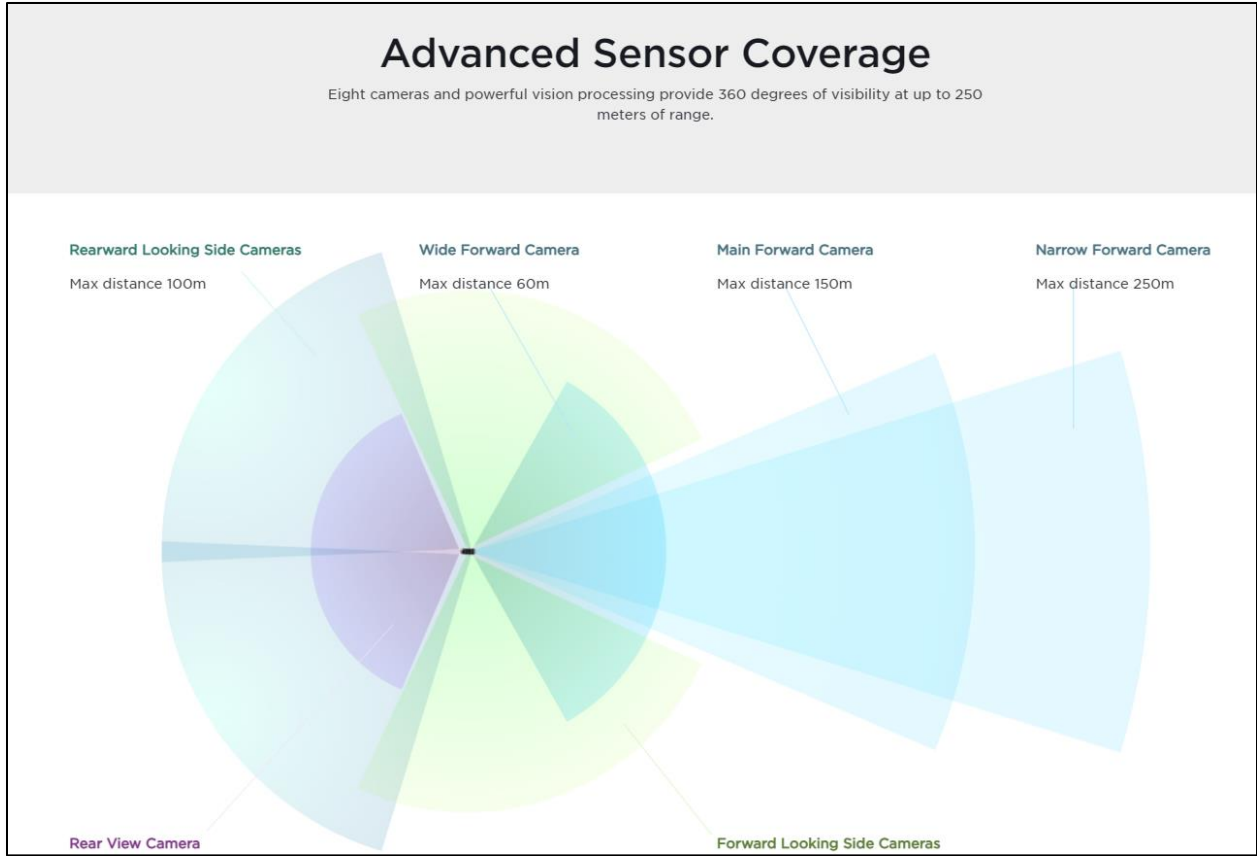
Tesla's Image Processing and Recognition Capabilities

21. Tesla markets its image processing and recognition technology that it incorporates in its automobiles, including its Autopilot and full self-driving capabilities.



<https://www.tesla.com/autopilot>.

22. Tesla's automobiles include up to eight cameras to provide 360 degrees of visibility. These cameras automatically detect objects, including cars and traffic lights.



<https://www.tesla.com/autopilot>.

23. Tesla's image processing and recognition technology enables Tesla's Autopilot functionality, including automatic steering, acceleration, braking, and navigation.

Autopilot

Autopilot advanced safety and convenience features are designed to assist you with the most burdensome parts of driving. Autopilot introduces new features and improves existing functionality to make your Tesla safer and more capable over time.

Autopilot enables your car to steer, accelerate and brake automatically within its lane.

Current Autopilot features require active driver supervision and do not make the vehicle autonomous.

Navigate on Autopilot

Navigate on Autopilot suggests lane changes to optimize your route, and makes adjustments so you don't get stuck behind slow cars or trucks. When active, Navigate on Autopilot will also automatically steer your vehicle toward highway interchanges and exits based on your destination.

Autosteer

Using advanced cameras, sensors and computing power, your Tesla will navigate tighter, more complex roads.

<https://www.tesla.com/autopilot>.

**COUNT 1:
INFRINGEMENT OF U.S. PATENT NO. 7,035,461**

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

25. MPV is the owner, by assignment, of U.S. Patent No. 7,035,461, titled “Method for Detecting Objects in Digital Images,” and alleges that Tesla has infringed and continues to infringe the ’461 Patent.

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

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

28. The United States Patent and Trademark Office issued the ’461 Patent on April 25, 2006.

29. Tesla has and continues to directly infringe at least claims 1 and 3 of the ’461 Patent by using (including its own testing), making, selling, offering for sale, licensing, and/or importing Tesla automobiles that include a Tesla Autopilot, Advanced Autopilot, and/or Full Self Driving Capability (collectively, the “’461 Infringing Instrumentalities”) without authorization or license as exemplified below.

30. Exemplary infringing Tesla automobiles include the Tesla Models S, 3, X, and Y.

31. Each of the '461 Infringing Instrumentalities satisfies each and every element of each asserted claim of the '461 Patent either literally or under the doctrine of equivalents.

32. Claim 1 of the '461 Patent recites an embodiment of the claimed subject matter:

1. A method for detecting objects in a digital image, comprising the steps of:
 - a) generating a first segmentation map of the digital image according to a non-object specific criterion;
 - b) generating a second segmentation map of the digital image according to a object specific criterion; and
 - c) detecting objects in the digital image using both the first and second segmentation maps.

33. Each of the '461 Infringing Instrumentalities detects objects such as preceding vehicles, road signs, and pedestrians in a digital image.



Neural Networks

Apply cutting-edge research to train deep neural networks on problems ranging from perception to control. Our per-camera networks analyze raw images to perform semantic segmentation, object detection and monocular depth estimation. Our birds-eye-view networks take video from all cameras to output the road layout, static infrastructure and 3D objects directly in the top-down view. Our networks learn from the most complicated and diverse scenarios in the world, iteratively sourced from our fleet of millions of vehicles in real time. A full build of Autopilot neural networks involves 48 networks that take 70,000 GPU hours to train 🍌. Together, they output 1,000 distinct tensors (predictions) at each timestep.

<https://www.tesla.com/AI>.



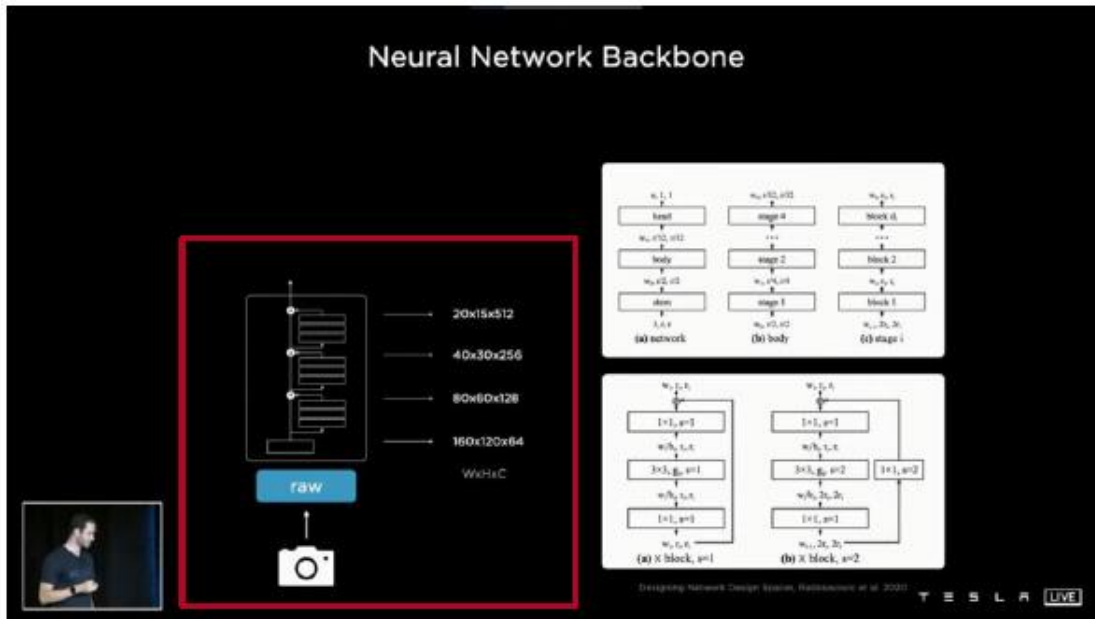
<https://www.youtube.com/watch?v=Ucp0TTmvqOE>

34. The '461 Infringing Instrumentalities include neural network hardware and software that when executing in its normal fashion extracts features from neurons at the highest level of the hierarchy (e.g., first segmentation map) to gather low resolution information such as scene context (e.g., non-object specific

criterion).

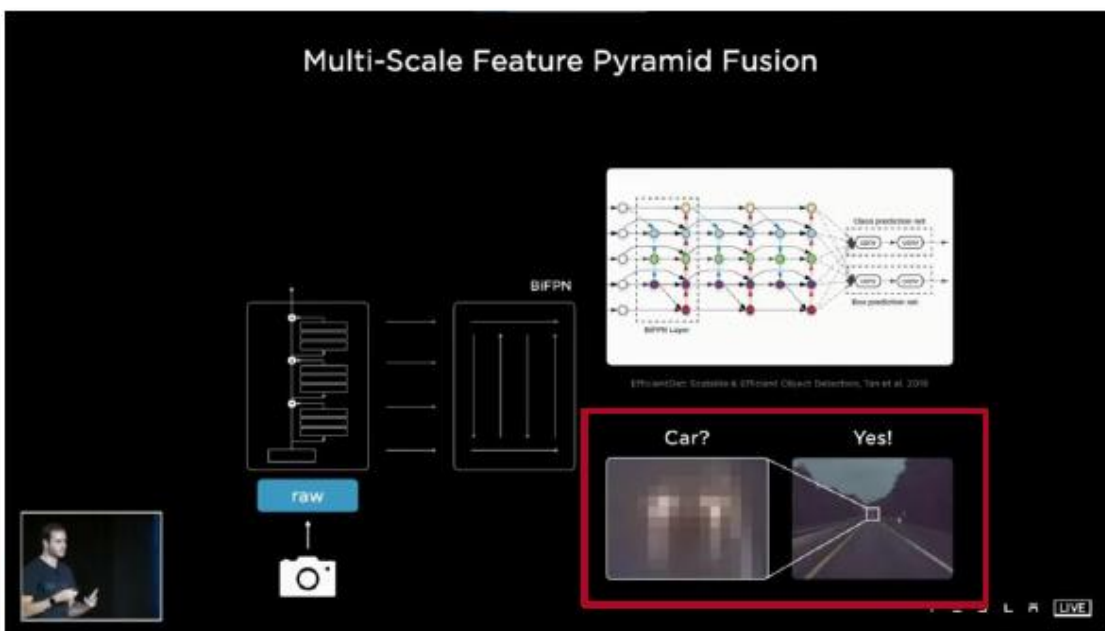
35. Tesla's neural network extracts features from neurons at the lowest level of the hierarchy (*e.g.*, second segmentation map) to gather high resolution information such as pixel regions of interest (*e.g.*, object specific criteria).

"In this case we use residual neural networks so we have a stem and a number of residual blocks connected in series. Now the specific class that we use are RegNets because we like that RegNets offer a very nice design space for neural networks because they allow you to very nicely trade off latency and uh accuracy. Now these RegNets give us as an output a number of features at different resolutions in different scales. So in particular on the very bottom of this feature hierarchy we have very high resolution information with very low channel counts and all the way at the top we have low resolution but high channel counts. So on the bottom we have a lot of neurons that are really scrutinizing the detail of the image, and on the top we have neurons that can see most of the image and a lot of that context have a lot of that scene context. We then like to process this with feature pyramid networks in our case we like to use FBNs and they get to multiple scales to talk to each other effectively and share a lot of information. So for example if you're a neuron all the way down in the network and you're looking at a small patch and you're not sure this is a car or not it definitely helps to know from the top players that hey you are actually in the vanishing point of this highway and so that helps you disambiguate that this is probably a car.



<https://www.youtube.com/watch?v=j0z4FweCy4M>.

36. The '461 Infringing Instrumentalities detects cars (e.g., objects) in the digital image using both high and low resolution features extracted from its training images.



“We then like to process this with feature pyramid networks. In our case we like to use by FBNs. And they get to multiple scales to talk to each other effectively and share a lot of information so for example if you're a neuron all the way down in the network and you're looking at a small patch and you're not sure this is a car or not it definitely helps to know from the top players that hey you are actually in the vanishing point of this highway. And so that helps you disambiguate that this is probably a car. After a FBN and a feature fusion across scales we then go into task specific heads. So for example if you are doing object detection we have a one stage YOLO like object detector here where we initialize a raster. And there's a binary bit per position telling you whether or not there's a car there. And then in addition to that if there is here's a bunch of other attributes you might be interested in so the x y with height offset or any of the other attributes like what type of a car is this and so on.”

<https://www.youtube.com/watch?v=j0z4FweCy4M>.

37. Claim 3 of the '461 Patent recites another embodiment of the claimed subject matter:

3. The method claimed in claim 1, further comprising the step of detecting objects using pattern matching in the first and second segmentation maps respectively and merging the detected objects.

38. The '461 Infringing Instrumentalities include a neural network that uses pattern matching to interpret large amounts of data from the high and low resolution features extracted from its training images (*e.g.*, first and second

segmentation maps) to identify objects.

“We have to understand that all those different brightness palette patterns actually correspond to [specific objects]. Now the reason you and I are very good at this we have a massive neural network inside our heads that’s processing those images. So light hits the retina, travels to the back of your brain to the visual cortex, and the original cortex consists of many neurons that are wired together and that are doing all the pattern recognition on top of those images. And really over the last I would say about five years the state-of-the-art approaches to processing images using computers have also started to use neural networks. But in this case artificial neural networks.”

“Then we need to feed lots of images of this to the neural net and neural that over time will basically pick up on this pattern that those things there don't matter but those leg line markings do. And we learn to predict to the correct lane. So what's really critical is not just the scale of the data set. We don't just want millions of images we actually need to do a really good job of covering the possible space of things that the car might encounter on the roads. So we need to teach the computer how to handle scenarios where it's light and we. You have all these different specular reflections and as you might imagine the brightness patterns and these images will look very different. We have to teach a computer how to deal with shadows; how to deal with forks in the road; how to deal with large objects that might be taking up most of that image; how to deal with tunnels; or how to do with construction sites. And in all these cases there's no again explicit mechanism to tell the network what to do. We only have massive amounts of data we want to source from all those images, and we want to annotate the correct lines and the network will pick up on the patterns of those.”

<https://www.youtube.com/watch?v=Ucp0TTmvqOE>.

39. Tesla received notice of infringement of the '461 Patent on May 27, 2022.

40. Tesla’s activities have been without authority of license under

the '461 Patent.

41. Consistent with Tesla's published descriptions and instructions, normal operation of the '461 Infringing Instrumentalities performed each and every step and satisfies each and every element recited in each asserted claim of the '461 Patent including claims 1 and 3 either literally or under the doctrine of equivalents.

42. Having knowledge or willful blindness to the fact that the third-party infringers' use of the '461 Infringing Instrumentalities in their intended manner practice at least claims 1 and 3 of the '461 Patent, Tesla has made no effort to avoid infringement and continues actively encouraged the third-party infringers to directly infringe the '461 Patent by making, using, testing, selling, offering for sale, importing and/or licensing the accused Tesla products; supporting and managing the third-party infringers' use; and providing technical assistance to the third-party infringers by, for example, publishing instructional information directing third-party infringers how to make and use the infringing products to practice one or more the infringing products to infringe at least claims 1 and 3 of the '461 Patent.

43. Tesla has and continues to advertise and promote infringing features of the '461 Infringing Instrumentalities and encourage third-party infringers to operate the accused Tesla products in an infringing manner.

44. Tesla's end users, customers, and other third-party infringers follow Tesla's directions to practice the asserted claims of the '461 Patent.

45. With the requisite knowledge, specific intent, or willful blindness, Tesla specifically intended to induce, did induce, and continues to induce the third-party infringers to infringe at least claims 1 and 3 of the '461 Patent, by, for example, publishing instructional information directing third-party infringers how to make and use the accused Tesla products to infringe claims 1 and 3 of the '461 Patent.

46. Encouraged and instructed by Tesla, third-party infringers acquired and operated the accused Tesla products to practice all limitations of the asserted claims of '461 Patent.

47. With the requisite knowledge, specific intent, or willful blindness, Tesla specifically intended to induce, and did induce, third-party infringers to infringe at least claims 1 and 3 of the '461 Patent. Tesla advised, encouraged, and aided third-party infringers to engage in direct infringement, including through its encouragement, advice, and assistance to the third-party infringers to use the infringing Tesla products.

48. Tesla has induced infringement and continues to induce infringement under 35 U.S.C. § 271(b) of at least claims 1 and 3 of the '461 Patent.

49. By no later than May 27, 2022, Tesla knew that the '461 Infringing

Instrumentalities are made and operate in a manner that satisfies all limitations of at least claims 1 and 3 of the '461 Patent.

50. Tesla's infringing conduct with respect to the '461 Patent has been undertaken intentionally and willfully. Having refused to take a license to lawfully practice the '461 Patent, Tesla made the business decision to "efficiently infringe" the '461 Patent. In so doing, Tesla willfully infringed the '461 Patent.

51. MPV has been damaged by Tesla's acts of direct and indirect infringement and is entitled to recover the damages sustained in an amount subject to proof at trial, which, by law, can be no less than a reasonable royalty, together with interest and costs as fixed by this Court, pursuant to 35 U.S.C. § 284.

**COUNT 2:
INFRINGEMENT OF U.S. PATENT NO. 7,062,085**

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

53. MPV is the owner, by assignment, of U.S. Patent No. 7,062,085, titled, "Method for Detecting Subject Matter Regions in Images."

54. As the owner of the '085 Patent, MPV holds all substantial rights in and under the '085 Patent, including the right to grant licenses, exclude others, and to enforce, sue, and recover damages for past and future infringement.

55. The '085 Patent is valid, enforceable and was duly issued by the

United States Patent and Trademark Office on June 13, 2006, in full compliance with Title 35 of the United States Code after a full and fair examination.

56. Tesla has and continues to directly infringe at least claim 1 of the '085 Patent by using (including its own testing), making, selling, offering for sale, licensing, and/or importing Tesla automobiles (collectively, the "'085 Infringing Instrumentalities") without authorization or license as exemplified below.

57. Exemplary infringing Tesla automobiles include the Tesla Models S, 3, X, and Y.

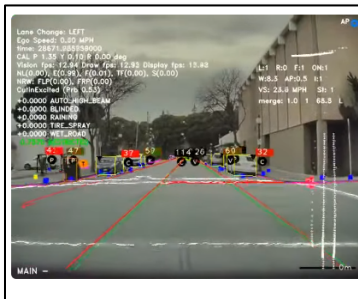
58. Each of the '085 Infringing Instrumentalities satisfies each and every element of each asserted claim of the '085 Patent either literally or under the doctrine of equivalents.

59. Claim 1 recites an embodiment of the claimed subject matter:
1. A method for detecting subject matter regions in a digital color image having pixels of (red, green, blue) values, comprising the steps of:
 - a) assigning to each pixel a belief value as belonging to the subject matter region based on color and texture features;
 - b) forming spatially contiguous candidate subject matter regions by thresholding the belief values;
 - (c) analyzing the spatially contiguous regions based on one or

more unique characteristics of the subject matter to determine the probability that a region belongs to the subject matter; and
d) generating a map of detected subject matter regions and associated probability that the regions belongs to the subject matter.

60. The '085 Infringing Instrumentalities perform a method for detecting subject matter regions in a digital color image having pixels of (red, green, blue) values.

61. The '085 Infringing Instrumentalities perform a method of object detection (*e.g.*, detecting subject matter regions) in a digital color image having red, green, blue (RGB) pixel values.



Neural Networks

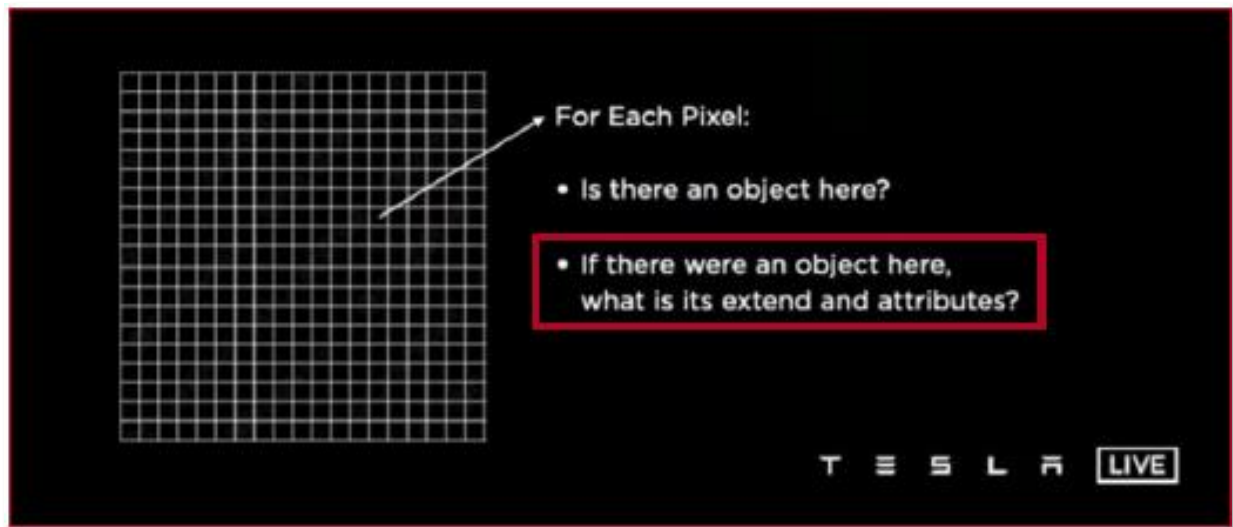
Apply cutting-edge research to train deep neural networks on problems ranging from perception to control. Our per-camera networks analyze raw images to perform semantic segmentation, object detection and monocular depth estimation. Our birds-eye-view networks take video from all cameras to output the road layout, static infrastructure and 3D objects directly in the top-down view. Our networks learn from the most complicated and diverse scenarios in the world, iteratively sourced from our fleet of millions of vehicles in real time. A full build of Autopilot neural networks involves 48 networks that take 70,000 GPU hours to train 🔥. Together, they output 1,000 distinct tensors (predictions) at each timestep.

<https://www.tesla.com/AI>.

“These images are to a computer really just a massive grid of pixels. And at each pixel you have the brightness value at that point and so instead of just seeing an image a computer really gets a million numbers in a grid that tell you the brightness values at all the positions. So we have to go from that grid of pixels and brightness values and to high-level concepts.”

<https://www.youtube.com/watch?v=Ucp0TTmvqOE>.

62. The '085 Infringing Instrumentalities include a neural network that assigns each pixel in the image a belief value based on its brightness (*e.g.*, color feature) and its number relative to the broader pattern of brightness values (*e.g.*, texture feature).



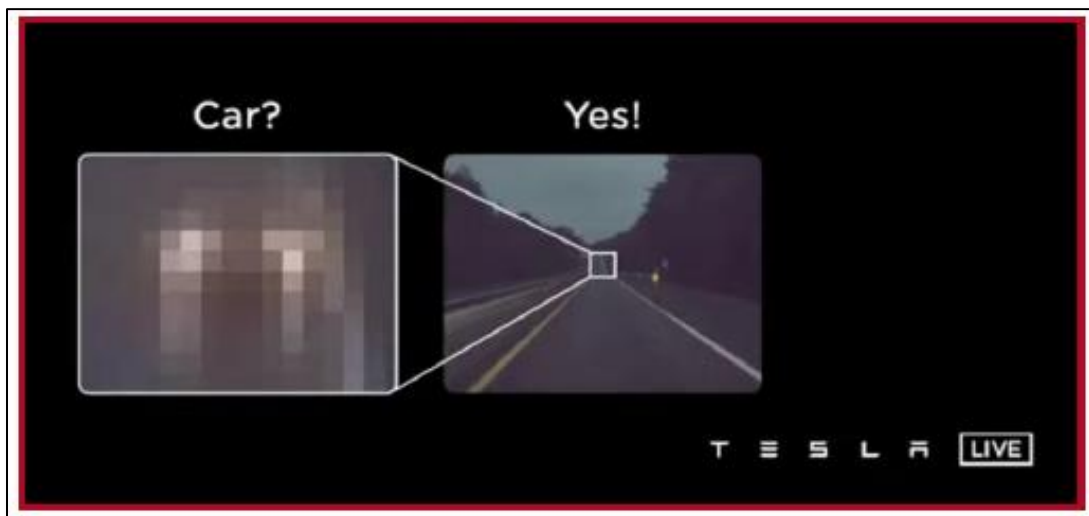
<https://www.youtube.com/watch?v=j0z4FweCy4M>.

“These images are to a computer really just a massive grid of pixels. And at each pixel you have the brightness value at that point and so instead of just seeing an image a computer really gets a million numbers in a grid that tell you the brightness values at all the positions. So we have to go from that grid of pixels and brightness values and to high-level concepts. And as you might imagine this [object] has a certain pattern of brightness values.”

<https://www.youtube.com/watch?v=Ucp0TTmvqOE>.

63. The '085 Infringing Instrumentalities include a neural network that

identifies patches (*e.g.*, candidate subject matter regions) from the grid of pixel values by its color and texture features (*e.g.*, thresholding belief values). The network then analyzes the patches based on the unique characteristics of a car being present (*e.g.*, the subject matter) such as the location being the vanishing point of the highway, or the height offset, to determine the probability that a region contains a car (*e.g.*, region belongs to the subject matter).



“We then like to process this with feature pyramid networks. In our case we like to use by FPNs. And they get to multiple scales to talk to each other effectively and share a lot of information so for example if you're a neuron all the way down in the network and you're looking at a small patch and you're not sure this is a car or not it definitely helps to know from the top players that hey you are actually in the vanishing point of this highway. And so that helps you disambiguate that this is probably a car. After a FPN and a feature fusion across scales we then go into task specific heads. So for example if you are doing object detection we have a one stage YOLO like object detector here where we initialize a raster. And there's a binary bit per position telling you whether or not there's a car there. And then in addition to that if there is here's a bunch of other attributes you might be interested in so the x y with height offset or any of the other attributes like what type of a car is this and so on.”

<https://www.youtube.com/watch?v=j0z4FweCy4M>.

64. The '085 Infringing Instrumentalities generates a map of regions of pixels (*e.g.*, detected subject matter regions) and associated probability that the region contains a car.



“We are processing individual images and we’re making a large number of predictions about these images. So, for example, here you can see predictions of the stop signs uh the stop lines, the lines, the edges, the cars, the traffic lights, the curbs, whether or not the car is sparked, all of the static objects like trash cans cones and so on and everything here.”

<https://www.youtube.com/watch?v=Ucp0TTmvqOE>.

65. Tesla received notice of infringement of the '085 Patent on May 27, 2022. Since receiving notice, and since MPV filed this suit, Tesla has not modified

the accused instrumentality or its instructions to end users to avoid infringement.

66. Consistent with Tesla's published descriptions and instructions, normal operation of the '085 Infringing Instrumentalities performs each and every step and satisfies each and every element recited in each asserted claim of the '085 Patent including claim 1 either literally or under the doctrine of equivalents.

67. Having knowledge or willful blindness to the fact that the third-party infringers' use of the '085 Infringing Instrumentalities in their intended manner practice at least claim 1 of the '085 Patent, Tesla has made no effort to avoid infringement and continues actively encouraged the third-party infringers to directly infringe the '085 Patent by making, using, testing, selling, offering for sale, importing and/or licensing the accused Tesla products; supporting and managing the third-party infringers' use; and providing technical assistance to the third-party infringers by, for example, publishing instructional information directing third-party infringers how to make and use the infringing products to practice one or more the infringing products to infringe at least claim 1 of the '085 Patent.

68. Tesla has and continues to advertise and promote infringing features of the '085 Infringing Instrumentalities and encourage third-party infringers to operate the accused Tesla products in an infringing manner.

69. Tesla's end users, customers, and other third-party infringers follow

Tesla's directions to practice the asserted claims of the '085 Patent.

70. With the requisite knowledge, specific intent, or willful blindness, Tesla specifically intended to induce, did induce, and continues to induce the third-party infringers to infringe at least claim 1 of the '085 Patent, by, for example, publishing instructional information directing third-party infringers how to make and use the accused Tesla products to infringe claim 1 of the '085 Patent.

71. Encouraged and instructed by Tesla, third-party infringers acquired and operated the accused Tesla products to practice all limitations of the asserted claims of '085 Patent.

72. With the requisite knowledge, specific intent, or willful blindness, Tesla specifically intended to induce, and did induce, third-party infringers to infringe at least claim 1 of the '085 Patent. Tesla advised, encouraged, and aided third-party infringers to engage in direct infringement, including through its encouragement, advice, and assistance to the third-party infringers to use the infringing Tesla products.

73. Tesla has induced infringement and continues to induce infringement under 35 U.S.C. § 271(b) of at least claim 1 of the '085 Patent.

74. By no later than May 27, 2022, Tesla knew that the '085 Infringing Instrumentalities are made and operate in a manner that satisfies all limitations of at least claim 1 of the '085 Patent.

75. Tesla's infringing conduct with respect to the '085 Patent has been undertaken intentionally and willfully. Having refused to take a license to lawfully practice the '085 Patent, Tesla made the business decision to "efficiently infringe" the '085 Patent. In so doing, Tesla willfully infringed the '085 Patent.

76. MPV has been damaged by Tesla's acts of direct and indirect infringement and is entitled to recover the damages sustained in an amount subject to proof at trial, which, by law, can be no less than a reasonable royalty, together with interest and costs as fixed by this Court, pursuant to 35 U.S.C. § 284.

**COUNT 3:
INFRINGEMENT OF U.S. PATENT NO. 7,233,684**

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

78. MPV is the owner, by assignment, of U.S. Patent No. 7,233,684, titled "Imaging Method and System Using Affective Information."

79. As the owner of the '684 Patent, MPV holds all substantial rights in and under the '684 Patent, including the right to grant licenses, exclude others, and to enforce, sue, and recover damages for past and future infringement.

80. The United States Patent and Trademark Office issued the '684 Patent on June 19, 2007, after a full examination that concluded in allowance of subject matter found to be in compliance with Title 25 of the United States Code.

81. Tesla has and continues to directly infringe at least claim 1 of the '684 Patent by using (including its own testing), making, selling, offering for sale, licensing, and/or importing Tesla automobiles (collectively, the "'684 Infringing Instrumentalities") without authorization or license as exemplified below.

82. Exemplary infringing Tesla automobiles include the Tesla Models S, 3, X, and Y.

83. Each of the '684 Infringing Instrumentalities satisfies each and every element of each asserted claim of the '684 Patent either literally or under the doctrine of equivalents.

84. Claim 1 recites an embodiment of the claimed subject matter:

1. An imaging method comprising the steps of
capturing an image of a scene;
collecting affective information at capture; and
associating the affective information with the scene image,
wherein the step of collecting affective information
comprises monitoring the physiology of a user and, wherein
the step of collecting affective information comprises the
steps of interpreting the collected physiological information
to determine the relative degree of importance of the scene
image.

85. The '684 Infringing Instrumentalities include a cabin camera that captures images of the driver (*e.g.*, “image of a scene”).

86. The '684 Infringing Instrumentalities also collect information including head position, eye position, and eye gaze.

87. The '684 Infringing Instrumentalities associate the eye and head activity with the scene image, wherein the step of collecting eye and head activity comprises monitoring the eye gaze of a user (*e.g.*, “physiology of a user”). Tesla interprets the eye gaze information to determine if the driver is inattentive (*e.g.*, “relative degree of importance”).

Cabin Camera

The cabin camera is located above the rear-view mirror in the following vehicles:

- Model S (produced in 2021 or later)
- Model 3
- Model X (produced in 2021 or later)
- Model Y

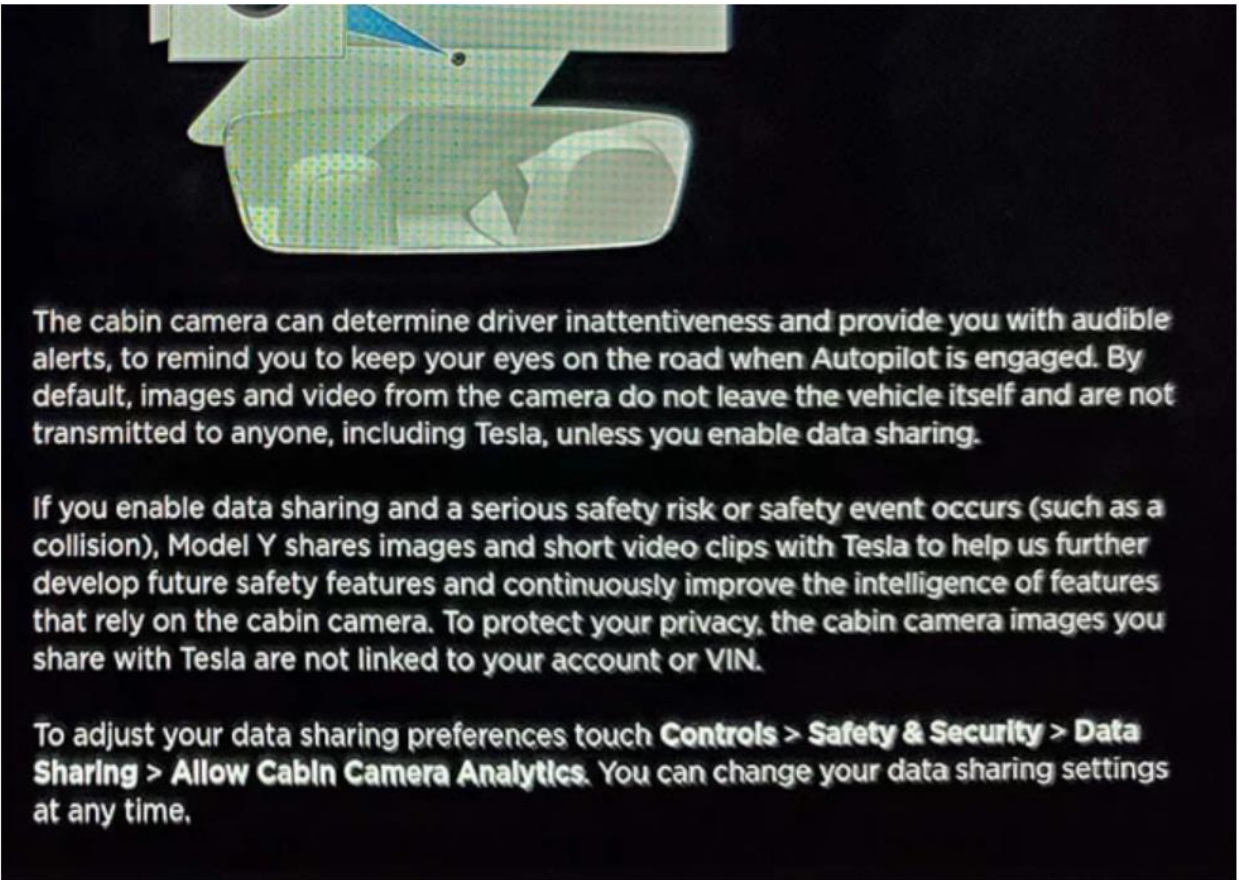
Cabin camera-based features are currently only available for Model 3 and Model Y vehicles equipped with Tesla Vision. For these eligible vehicles, the cabin camera can determine driver inattentiveness and provide you with audible alerts to remind you to keep your eyes on the road when Autopilot is engaged. To protect your privacy, images and video from the cabin camera do not leave the vehicle itself and are not transmitted to anyone, including us, unless you enable data sharing.

If you choose to enable data sharing, in the occurrence of a serious safety risk or a safety event like a collision, the vehicle can share images and short video clips with us to help develop future safety features and software enhancements, such as collision avoidance.

To adjust your data sharing preferences, tap 'Controls' > 'Software' > 'Data Sharing' > 'Allow Cabin Camera Analytics.'

The cabin camera images you share with us are not linked to your VIN and will be used to continuously improve the intelligence of features that rely on cabin camera. You may change your data sharing settings at any time.

<https://www.tesla.com/support/vehicle-safety-security-features>.



Tesla's own explanation of its cabin camera.

<https://www.consumerreports.org/cars/car-safety/tesla-driver-monitoring-fails-to-keep-driver-focus-on-road-a3964813328/>.



<https://electrek.co/2021/05/27/tesla-releases-driver-monitoring-system-cabin-camera/>.

88. Another example of Tesla's infringement of the '684 Patent is shown by Tesla's testing of the driver monitoring system in the full self-driving mode of the '684 Infringing Instrumentalities. This is shown in the video below:



<https://www.youtube.com/live/j0z4FweCy4M?si=HmDzC7P5zk6FUfg4&t=2288>.

89. Tesla received notice of infringement of the '684 Patent on March 4, 2022. Since receiving notice, and since MPV filed this suit, Tesla has not modified the accused instrumentality or its instructions to end users to avoid infringement.

90. Consistent with Tesla's published descriptions and instructions, normal operation of the '684 Infringing Instrumentalities performs each and every step and satisfies each and every element recited in each asserted claim of the '684 Patent including claim 1 either literally or under the doctrine of equivalents.

91. Having knowledge or willful blindness to the fact that the third-party infringers' use of the '684 Infringing Instrumentalities in their intended manner practice at least claim 1 of the '684 Patent, Tesla has made no effort to avoid infringement and continues actively encouraged the third-party infringers to

directly infringe the '684 Patent by making, using, testing, selling, offering for sale, importing and/or licensing the accused Tesla products, and by, for example: marketing them to third-party infringers; supporting and managing the third-party infringers' use; and providing technical assistance to the third-party infringers by, for example, publishing instructional information directing third-party infringers how to make and use the infringing products to practice one or more the infringing products to infringe at least claim 1 of the '684 Patent.

92. Tesla has and continues to advertise and promote infringing features of the '684 Infringing Instrumentalities and encourage third-party infringers to operate the accused Tesla products in an infringing manner.

93. Tesla's end users, customers, and other third-party infringers follow Tesla's directions to practice the asserted claims of the '684 Patent.

94. With the requisite knowledge, specific intent, or willful blindness, Tesla specifically intended to induce, did induce, and continues to induce the third-party infringers to infringe at least claim 1 of the '684 Patent, by, for example, publishing instructional information directing third-party infringers how to make and use the accused Tesla products to infringe claim 1 of the '684 Patent.

95. Encouraged and instructed by Tesla, third-party infringers acquired and operated the accused Tesla products to practice all limitations of the asserted claims of '684 Patent.

96. With the requisite knowledge, specific intent, or willful blindness, Tesla specifically intended to induce, and did induce, third-party infringers to infringe at least claim 1 of the '684 Patent. Tesla advised, encouraged, and aided third-party infringers to engage in direct infringement, including through its encouragement, advice, and assistance to the third-party infringers to use the infringing Tesla products.

97. Tesla has induced infringement and continues to induce infringement under 35 U.S.C. § 271(b) of at least claim 1 of the '684 Patent.

98. By no later than March 4, 2022, Tesla knew that the '684 Infringing Instrumentalities are made and operate in a manner that satisfies all limitations of at least claim 1 of the '684 Patent.

99. Tesla's infringing conduct with respect to the '684 Patent has been undertaken intentionally and willfully. Having refused to take a license to lawfully practice the '684 Patent, Tesla made the business decision to "efficiently infringe" the '684 Patent. In so doing, Tesla willfully infringed the '684 Patent.

100. MPV has been damaged by Tesla's acts of direct and indirect infringement and is entitled to recover the damages sustained in an amount subject to proof at trial, which, by law, can be no less than a reasonable royalty, together with interest and costs as fixed by this Court, pursuant to 35 U.S.C. § 284.

**COUNT 4:
INFRINGEMENT OF U.S. PATENT NO. 7,418,116**

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

102. MPV is the owner, by assignment, of U.S. Patent No. 7,418,116, titled “A Method for Determining Affective Information.”

103. As the owner of the ’116 Patent, MPV holds all substantial rights in and under the ’116 Patent, including the right to grant licenses, exclude others, and to enforce, sue, and recover damages for past and future infringement.

104. The United States Patent and Trademark Office issued the ’116 Patent on August 26, 2008, after a full examination that concluded in allowance of subject matter found to be in compliance with Title 25 of the United States Code.

105. Tesla had directly infringed at least claim 1 of the ’116 Patent by using (including its own testing), making, selling, offering for sale, licensing, and/or importing Tesla automobiles (collectively, the “’116 Infringing Instrumentalities”) during the term of the patent without authorization or license as exemplified below.

106. Exemplary infringing Tesla automobiles include the Tesla Models S, 3, X, and Y.

107. Each of the ’116 Infringing Instrumentalities satisfied each and every

element of each asserted claim of the '116 Patent either literally or under the doctrine of equivalents.

108. Claim 1 recites an embodiment of the claimed subject matter:

1. A method for determining affective information comprising the steps of:

obtaining affective signals including facial characteristics and physiological characteristics of a user of an image capture system;

analyzing the facial characteristics;

analyzing the physiological characteristics; and,

determining an emotional state based upon the analysis of the facial and physiological characteristics of the user.

109. In one embodiment, the '116 Patent discloses determining the emotional state of a person based on analyzing facial and physiological characteristics of that person:

(57)

ABSTRACT

Methods for determining affective information are provided as are imaging systems that determine affective information. In accordance with one method, affective signals are obtained containing facial characteristics and physiological characteristics of a person. The facial characteristics are analyzed and the physiological characteristics are analyzed. The emotional state of the person is determined based upon analysis of the facial and physiological characteristics of the person.

,
'116 Patent at Abstract.

110. The '116 Patent describes “a wide range emotional reactions” or states, including “joy, sadness, anger, fear, and interest.” '116 Patent at 3:45-48.

111. The '116 Infringing Instrumentalities include a cabin camera that obtained affective signals including head position and eye position (*e.g.*, “facial characteristics”), and eye gaze (*e.g.*, “physiological characteristics”) of the driver.

112. The '116 Infringing Instrumentalities analyzed the head position, eye position, and eye gaze of the driver.

Cabin Camera

The cabin camera is located above the rear-view mirror in the following vehicles:

- Model S (produced in 2021 or later)
- Model 3
- Model X (produced in 2021 or later)
- Model Y

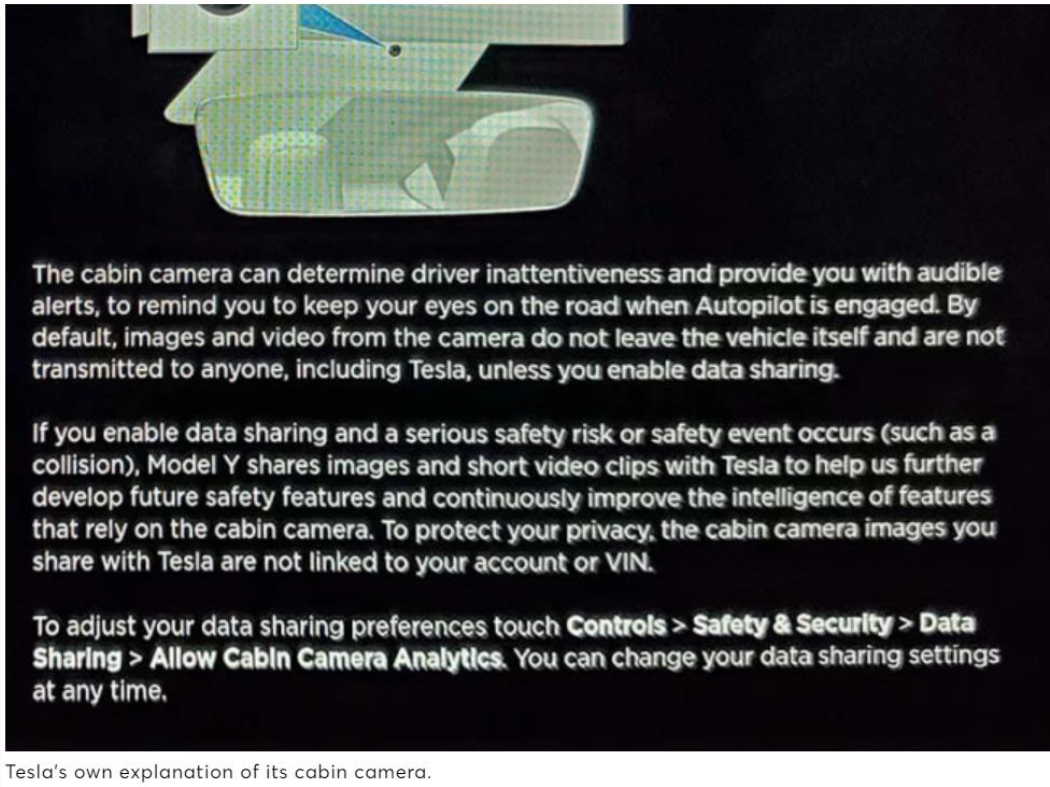
Cabin camera-based features are currently only available for Model 3 and Model Y vehicles equipped with Tesla Vision. For these eligible vehicles, the cabin camera can determine driver inattentiveness and provide you with audible alerts to remind you to keep your eyes on the road when Autopilot is engaged. To protect your privacy, images and video from the cabin camera do not leave the vehicle itself and are not transmitted to anyone, including us, unless you enable data sharing.

If you choose to enable data sharing, in the occurrence of a serious safety risk or a safety event like a collision, the vehicle can share images and short video clips with us to help develop future safety features and software enhancements, such as collision avoidance.

To adjust your data sharing preferences, tap 'Controls' > 'Software' > 'Data Sharing' > 'Allow Cabin Camera Analytics.'

The cabin camera images you share with us are not linked to your VIN and will be used to continuously improve the intelligence of features that rely on cabin camera. You may change your data sharing settings at any time.

<https://www.tesla.com/support/vehicle-safety-security-features>.

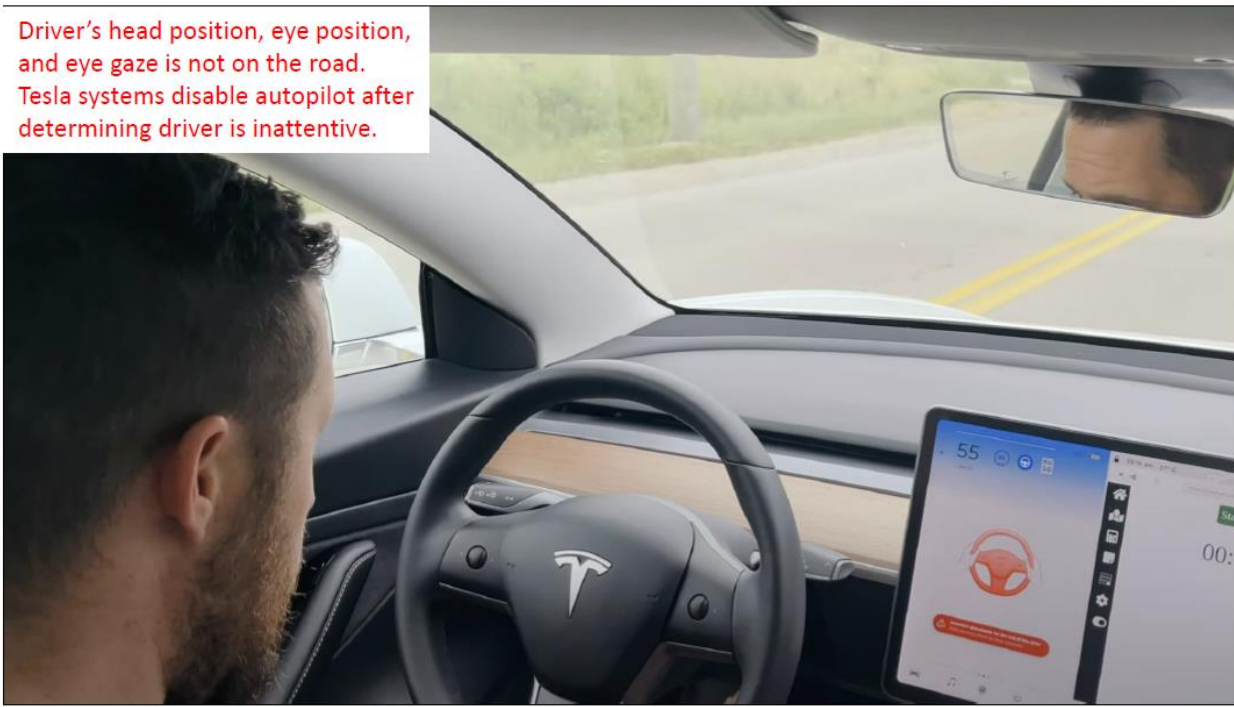


<https://www.consumerreports.org/cars/car-safety/tesla-driver-monitoring-fails-to-keep-driver-focus-on-road-a3964813328/>.



<https://electrek.co/2021/05/27/tesla-releases-driver-monitoring-system-cabin-camera/>.

113. Tesla determines a driver's interest (e.g., "emotional state") based upon the analysis of the driver's head position, eye position, and eye gaze.



https://www.youtube.com/watch?v=vtYPTt5Z0Po&ab_channel=NorthernTesla.

114. Another example of Tesla's infringement of the '116 Patent is shown by Tesla's testing of the driver monitoring system in the full self-driving mode of the '116 Infringing Instrumentalities. This is shown in the video below

<https://www.youtube.com/live/j0z4FweCy4M?si=HmDzC7P5zk6FUfg4&t=2288>.



115. Tesla received notice of infringement of the '116 Patent on March 4, 2022. Since receiving notice, Tesla has not modified the accused instrumentality or its instructions to end users to avoid infringement.

116. Consistent with Tesla's published descriptions and instructions, normal operation of the '116 Infringing Instrumentalities performed each and every step and satisfied each and every element recited in each asserted claim of the '116 Patent including claim 1 either literally or under the doctrine of equivalents.

117. Having knowledge or willful blindness to the fact that the third-party infringers' use of the '116 Infringing Instrumentalities in their intended manner practice at least claim 1 of the '116 Patent, Tesla made no effort to avoid infringement during the term of the patent and actively encouraged the third-party

infringers to directly infringe the '116 Patent during the term of the patent by making, using, testing, selling, offering for sale, importing and/or licensing the accused Tesla products, and by, for example: marketing them to third-party infringers; supporting and managing the third-party infringers' use; and providing technical assistance to the third-party infringers by, for example, publishing instructional information directing third-party infringers how to make and use the infringing products to practice one or more the infringing products to infringe at least claim 1 of the '116 Patent.

118. Tesla advertised and promoted the infringing features of the '116 Infringing Instrumentalities and encouraged third-party infringers to operate the accused Tesla products in an infringing manner during the term of the patent.

119. Tesla's end users, customers, and other third-party infringers followed Tesla's directions to practice the asserted claims of the '116 Patent during the term of the patent.

120. With the requisite knowledge, specific intent, or willful blindness, Tesla specifically intended to induce, did induce the third-party infringers to infringe at least claim 1 of the '116 Patent during the term of the patent, by for example, publishing instructional information directing third-party infringers how to make and use the accused Tesla products to infringe claim 1 of the '116 Patent.

121. Encouraged and instructed by Tesla, third-party infringers acquired

and operated the accused Tesla products to practice all limitations of the asserted claims of '116 Patent.

122. With the requisite knowledge, specific intent, or willful blindness, Tesla specifically intended to induce, and did induce, third-party infringers to infringe at least claim 1 of the '116 Patent during the term of the patent. Tesla advised, encouraged, and aided third-party infringers to engage in direct infringement, including through its encouragement, advice, and assistance to the third-party infringers to use the infringing Tesla products.

123. Tesla has induced infringement during the term of the patent under 35 U.S.C. § 271(b) of at least claim 1 of the '116 Patent.

124. By no later than March 4, 2022, Tesla knew that the '116 Infringing Instrumentalities are made and operate in a manner that satisfies all limitations of at least claim 1 of the '116 Patent.

125. Tesla's infringing conduct with respect to the '116 Patent was undertaken intentionally and willfully. Having refused to take a license to lawfully practice the '116 Patent, Tesla made the business decision to "efficiently infringe" the '116 Patent. In so doing, Tesla willfully infringed the '116 Patent.

126. MPV has been damaged by Tesla's acts of direct and indirect infringement and is entitled to recover the damages sustained in an amount subject to proof at trial, which, by law, can be no less than a reasonable royalty, together

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

**COUNT 5:
INFRINGEMENT OF U.S. PATENT NO. 7,860,320**

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

128. MPV is the owner, by assignment, of U.S. Patent No. 7,860,320, titled “Classifying Image Regions Based on Picture Location.”

129. As the owner of the ’320 Patent, MPV holds all substantial rights in and under the ’320 Patent, including the right to grant licenses, exclude others, and to enforce, sue, and recover damages for past and future infringement.

130. The United States Patent and Trademark Office issued the ’320 Patent on December 28, 2010, after a full examination that concluded in allowance of subject matter found to be in compliance with Title 25 of the United States Code.

131. Tesla has and continues to directly infringe at least claim 1 of the ’320 Patent by using (including its own testing), making, selling, offering for sale, licensing, and/or importing Tesla automobiles (collectively, the “’320 Infringing Instrumentalities”) without authorization or license as exemplified below.

132. Exemplary infringing Tesla automobiles include the Tesla Models S, 3, X, and Y.

133. Each of the ’320 Infringing Instrumentalities satisfies each and every

element of each asserted claim of the '320 Patent either literally or under the doctrine of equivalents.

134. Claim 1 recites an embodiment of the claimed subject matter:

1. A method of classifying regions of image pixels in a digital image or video captured by an image capture device

comprising:

a) providing a geographic location determining device

associated with the image capture device that provides an image capture GPS location associated with an image;

b) using the location determining device to provide the image capture GPS location at substantially the time that the digital image or video was captured; and

c) using a data processor for classifying regions of image pixels in the captured digital image or video into one or more material

classes based on a spatial context model that indicates the

likelihood that specific material classes occur or co-occur in

images or videos captured at the particular image capture GPS

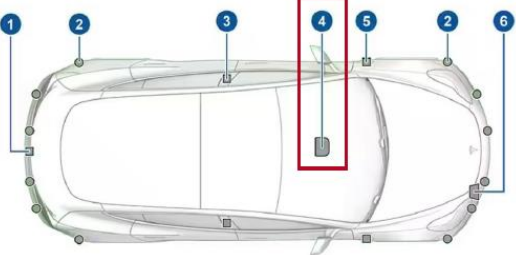
location.

135. The '320 Infringing Instrumentalities include a Tesla Autosteer that classifies open driving lanes (*e.g.*, regions of image pixels) in a digital image

captured by cameras mounted to the windshield (e.g., an image capture device).

How It Works

Your Model 3 includes the following components that actively monitor the surrounding area:



1. A camera is mounted above the rear license plate.
2. Ultrasonic sensors are located in the front and rear bumpers.
3. A camera is mounted in each door pillar.
4. Three cameras are mounted to the windshield above the rear view mirror.
5. A camera is mounted to each front fender.
6. Radar (if equipped) is mounted behind the front bumper.

Autosteer builds upon Traffic-Aware Cruise Control (see [Traffic-Aware Cruise Control on page 109](#)), intelligently keeping Model 3 in its driving lane when cruising at a set speed. Autosteer also allows you to use the turn signals to move Model 3 into an adjacent lane (see [Auto Lane Change on page 118](#)). Using the vehicle's camera(s), the radar sensor, and the ultrasonic sensors, Autosteer detects lane markings and the presence of vehicles and objects to assist you in steering Model 3.

Tesla Model 3 User Manual (2022). See also [https://www.tesla.com/ownersmanual/2012_2020_models/en_jo/GUID-69AEB326-9831-424E-96AD-4021EABCB699.html#:~:text=Autosteer%20builds%20upon%20Traffic%2DAware,\(see%20Auto%20Lane%20Change\).](https://www.tesla.com/ownersmanual/2012_2020_models/en_jo/GUID-69AEB326-9831-424E-96AD-4021EABCB699.html#:~:text=Autosteer%20builds%20upon%20Traffic%2DAware,(see%20Auto%20Lane%20Change).)

136. The '320 Infringing Instrumentalities use the vehicle's GPS system (e.g., geographic location determining device) in addition to the front windshield cameras (e.g., image capture device) to provide an image capture GPS location associated with the captured images.

When Navigate on Autopilot is engaged, Model 3 automatically makes both speed-based and route-based lane changes:

- **Speed Based Lane Changes:** Navigate on Autopilot changes lanes to reduce driving time to your destination. For example, if Model 3 is behind a vehicle going below the set cruising speed, Navigate on Autopilot will move into the passing lane to pass it. Speed-based lanes changes are optional.
- **Route Based Lane Changes:** Navigate on Autopilot changes lanes to route you to your destination. For example, Navigate on Autopilot will move into the exit lane as Model 3 approaches the off-ramp specified by the navigation route.

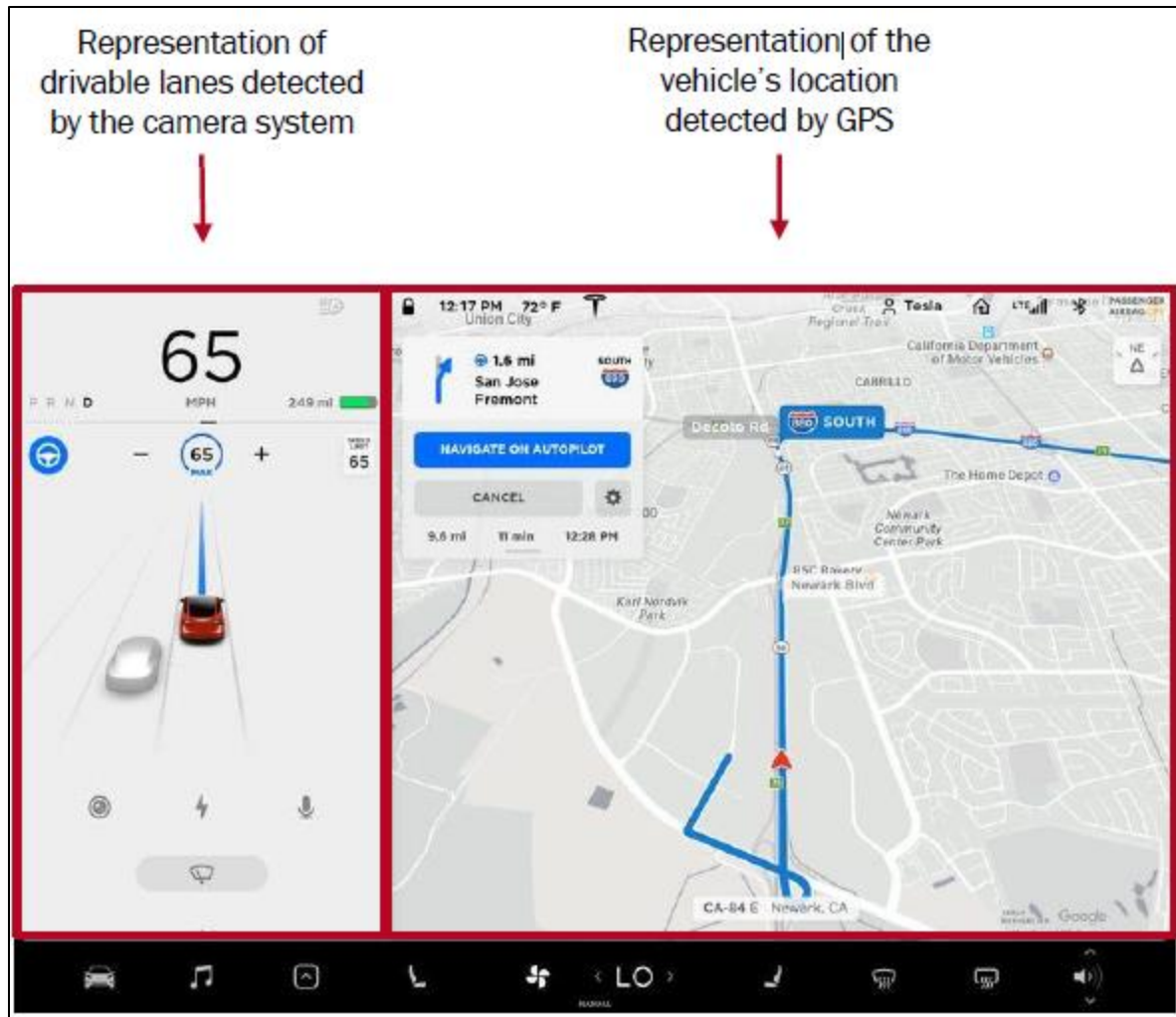
Traffic-Aware Cruise Control and Autosteer use information from the cameras on Model 3 to detect lane markings, road edges, and other vehicles and road users around Model 3.

https://www.tesla.com/ownersmanual/model3/en_us/GUID-20F2262F-CDF6-408E-A752-2AD9B0CC2FD6.html.

137. The '320 Infringing Instrumentalities use GPS (*e.g.*, “location determining device”) to provide the image capture GPS location in real time (*e.g.*, “substantially the time the image or video was captured”) whenever the navigate on autopilot feature is used.

The Tesla ‘navigate on autopilot’ feature evolves beyond lane-following and can change lanes automatically and even drive the car from on-ramp to off-ramp under driver oversight. [80], [81]. These vehicles use a GNSS receiver coupled with a road-level map to perform the navigation function along with state-of-the-art computer vision to perceive the local environment including detecting lanes [82]. Control input is primarily derived from its eight cameras and forward looking radar. The Tesla neural network approach utilizes its fleet to

https://www.swiftnav.com/sites/default/files/whitepapers/swift_nav_modern_gnss_autonomous_vehicles.pdf.



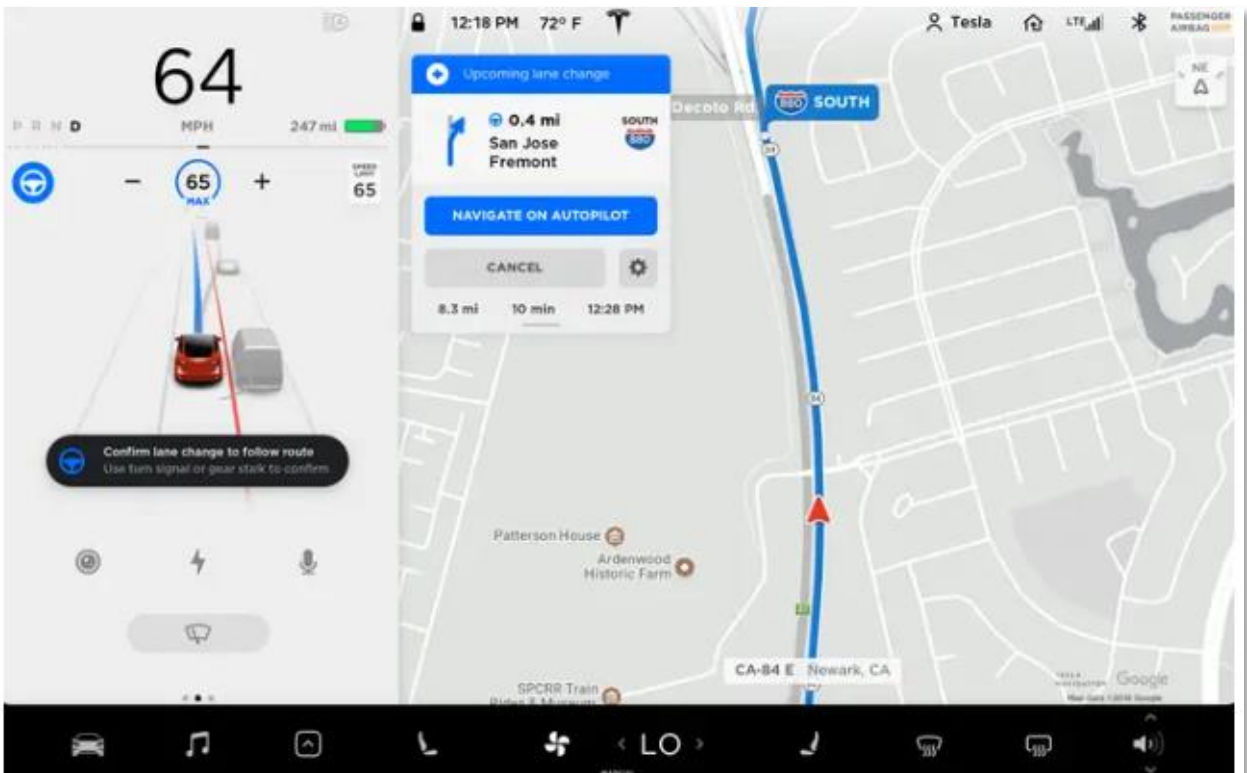
<https://www.businessinsider.com/teslas-navigate-on-autopilot-review-2018-11>.

138. The '320 Infringing Instrumentalities use a data processor to classify open driving lanes into either acceptable or no-go (e.g., material class) using a spatial context model that indicates the likelihood that a lane change is advisable to maintain the route based on data from the cameras and the GPS location.

When Navigate on Autopilot is engaged, Model 3 automatically makes both speed-based and route-based lane changes:

- **Speed Based Lane Changes:** Navigate on Autopilot changes lanes to reduce driving time to your destination. For example, if Model 3 is behind a vehicle going below the set cruising speed, Navigate on Autopilot will move into the passing lane to pass it. Speed-based lanes changes are optional.
- **Route Based Lane Changes:** Navigate on Autopilot changes lanes to route you to your destination. For example, Navigate on Autopilot will move into the exit lane as Model 3 approaches the off-ramp specified by the navigation route.

https://www.tesla.com/ownersmanual/model3/en_us/GUID-20F2262F-CDF6-408E-A752-2AD9B0CC2FD6.html#:~:text=Speed%20Based%20Lane%20Changes%3A%20Navigate%20on%20Autopilot%20changes%20lanes%20to,passing%20lane%20to%20pass%20it.



The red line means no-go for a lane change. Tesla

<https://www.businessinsider.com/teslas-navigate-on-autopilot-review-2018-11.>

139. Tesla received notice of infringement of the '320 Patent on May 27, 2022. Since receiving notice, and since MPV filed this suit, Tesla has not modified the accused instrumentality or its instructions to end users to avoid infringement.

140. Consistent with Tesla's published descriptions and instructions, normal operation of the '320 Infringing Instrumentalities performs each and every step and satisfies each and every element recited in each asserted claim of the '320 Patent including claim 1 either literally or under the doctrine of equivalents.

141. Having knowledge or willful blindness to the fact that the third-party infringers' use of the '320 Infringing Instrumentalities in their intended manner practice at least claim 1 of the '320 Patent, Tesla has made no effort to avoid infringement and continues actively encouraged the third-party infringers to directly infringe the '320 Patent by making, using, testing, selling, offering for sale, importing and/or licensing the accused Tesla products, and by, for example: marketing them to third-party infringers; supporting and managing the third-party infringers' use; and providing technical assistance to the third-party infringers by, for example, publishing instructional information directing third-party infringers how to make and use the infringing products to practice one or more the infringing products to infringe at least claim of the '320 Patent.

142. Tesla has and continues to advertise and promote infringing features of the '320 Infringing Instrumentalities and encourage third-party infringers to

operate the accused Tesla products in an infringing manner.

143. Tesla's end users, customers, and other third-party infringers follow Tesla's directions to practice the asserted claims of the '320 Patent.

144. With the requisite knowledge, specific intent, or willful blindness, Tesla specifically intended to induce, did induce, and continues to induce the third-party infringers to infringe at least claim 1 of the '320 Patent, by, for example, publishing instructional information directing third-party infringers how to make and use the accused Tesla products to infringe claim 1 of the '320 Patent.

145. Encouraged and instructed by Tesla, third-party infringers acquired and operated the accused Tesla products to practice all limitations of the asserted claims of '320 Patent.

146. With the requisite knowledge, specific intent, or willful blindness, Tesla specifically intended to induce, and did induce, third-party infringers to infringe at least claim 1 of the '320 Patent. Tesla advised, encouraged, and aided third-party infringers to engage in direct infringement, including through its encouragement, advice, and assistance to the third-party infringers to use the infringing Tesla products.

147. Tesla has induced infringement and continues to induce infringement under 35 U.S.C. § 271(b) of at least claim 1 of the '320 Patent.

148. By no later than May 27, 2022, Tesla knew that the '320 Infringing

Instrumentalities are made and operate in a manner that satisfies all limitations of at least claim 1 of the '320 Patent.

149. Tesla's infringing conduct with respect to the '320 Patent has been undertaken intentionally and willfully. Having refused to take a license to lawfully practice the '320 Patent, Tesla made the business decision to "efficiently infringe" the '320 Patent. In so doing, Tesla willfully infringed the '320 Patent.

150. MPV has been damaged by Tesla's acts of direct and indirect infringement and is entitled to recover the damages sustained in an amount subject to proof at trial, which, by law, can be no less than a reasonable royalty, together with interest and costs as fixed by this Court, pursuant to 35 U.S.C. § 284.

**COUNT 6:
INFRINGEMENT OF U.S. PATENT NO. 8,836,784**

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

152. MPV is the owner, by assignment, of U.S. Patent No. 8,836,784, titled "Remote Determination of Image-Acquisition Settings and Opportunities."

153. As the owner of the '784 Patent, MPV holds all substantial rights in and under the '784 Patent, including the right to grant licenses, exclude others, and to enforce, sue, and recover damages for past and future infringement.

154. The United States Patent and Trademark Office issued the '784 Patent

on September 16, 2014, after a full examination that concluded in allowance of subject matter found to be in compliance with Title 25 of the United States Code.

155. Tesla has and continues to directly infringe at least claim 25 of the '784 Patent by using (including its own testing), making, selling, offering for sale, licensing, and/or importing Tesla automobiles (collectively, the "'784 Infringing Instrumentalities") without authorization or license as exemplified below.

156. Exemplary infringing Tesla automobiles include the Tesla Models S, 3, X, and Y.

157. Each of the '784 Infringing Instrumentalities satisfies each and every element of each asserted claim of the '784 Patent either literally or under the doctrine of equivalents.

158. Claim 25 recites an embodiment of the claimed subject matter:

25. A method comprising:

performing, by a processing system, a first function to monitor operation of a motor vehicle via an image capture device, wherein the image capture device comprises a digital camera configured to capture a video sequence of digital images; periodically using, by the processing system, the digital camera in a second function different from the first function to capture

digital images at a first capture frequency;

storing, by the processing system, the periodically captured digital images in the image memory system for a specified period of time;

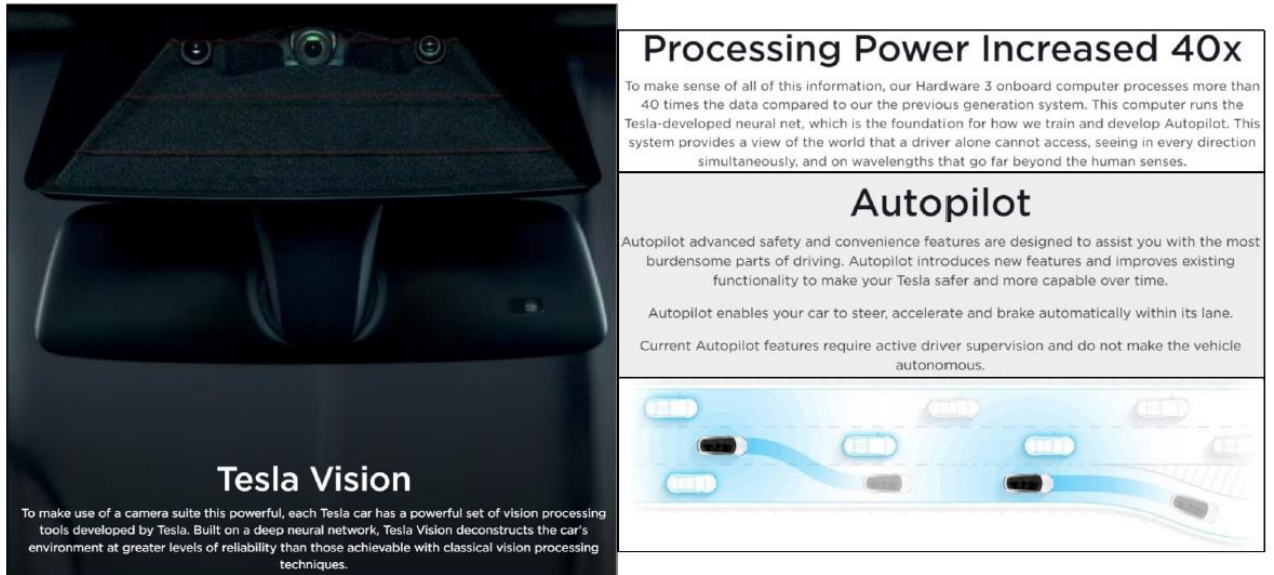
receiving, at the processing system, an input indicating a detection of an exception event from an exception event detection mechanism, wherein the exception event detection mechanism is configured to process inputs received from a plurality of sensing devices;

determining, by the processing system, a type of the exception event based on data captured by the image capture device in the second function;

storing, by the processing system, metadata with the captured digital images, wherein the metadata comprises the determined type of the exception event; and providing, by the processing system, a response to the exception event.

159. The '784 Infringing Instrumentalities include a camera and a processor that monitors the positions of the surroundings when autopilot is active (*e.g.*, “monitor operation of a motor vehicle via an image capture device”), wherein the cameras are configured to capture video (*e.g.*, “a video sequence of digital

images”).



Processing Power Increased 40x

To make sense of all of this information, our Hardware 3 onboard computer processes more than 40 times the data compared to our the previous generation system. This computer runs the Tesla-developed neural net, which is the foundation for how we train and develop Autopilot. This system provides a view of the world that a driver alone cannot access, seeing in every direction simultaneously, and on wavelengths that go far beyond the human senses.

Autopilot

Autopilot advanced safety and convenience features are designed to assist you with the most burdensome parts of driving. Autopilot introduces new features and improves existing functionality to make your Tesla safer and more capable over time.

Autopilot enables your car to steer, accelerate and brake automatically within its lane.

Current Autopilot features require active driver supervision and do not make the vehicle autonomous.

Tesla Vision

To make use of a camera suite this powerful, each Tesla car has a powerful set of vision processing tools developed by Tesla. Built on a deep neural network, Tesla Vision deconstructs the car's environment at greater levels of reliability than those achievable with classical vision processing techniques.

<https://www.tesla.com/autopilot>.

160. The '784 Infringing Instrumentalities periodically use the cameras for sentry mode (*e.g.*, “a second function different from the first function”), using the connected cameras to capture digital images at the cameras’ frames per second (FPS) (*e.g.*, “first capture frequency”).

Dashcam

Note

Depending on market region, vehicle configuration, options purchased, and software version, your vehicle may not be equipped with Dashcam or the features may not operate exactly as described. It is your sole responsibility to consult and comply with all local regulations and property restrictions regarding the use of cameras.

Dashcam records video footage of your vehicle's surroundings when driving Model 3. Use Dashcam to record driving incidents or other notable events, like you would for an external dashcam on other vehicles.

The Dashcam icon is located in the app launcher. You can add the Dashcam app to the bottom bar for easy access (see [Customizing My Apps](#)). When Model 3 is in Park, touching the Dashcam icon displays the Viewer (see [Viewing Video Recordings](#)).



To protect your privacy, video recordings are saved locally to a formatted USB flash drive's onboard memory. Recordings are not sent to Tesla. Model 3 does not record videos when Dashcam is **Off**.

https://www.tesla.com/ownersmanual/model3/en_us/GUID-3BCC07CE-5EA2-4F40-99D1-27690898FF3C.html.

161. The '784 Infringing Instrumentalities camera system stores the captured video images (e.g., "image memory system") until storage space on the USB flash drive becomes limited, then the oldest Sentry Clips are deleted to provide space for new ones (e.g., "specified period of time").

When enabled, Sentry Mode is idle, ready to sound the alarm and save a recording of the security event if triggered. See [Viewing Video Recordings](#) for information on viewing footage.

5. To silence the security alarm and audio system when the alarm is triggered, navigate to **Controls > Safety > Disable Sentry Sounds**. When enabled, Sentry Mode still sends a notification through the mobile app and saves the last 10 minutes footage.

Note

When the internal storage reaches full capacity, new recordings from Alert and Alarm events overwrite the older recordings.

https://www.tesla.com/ownersmanual/model3/en_us/GUID-56703182-8191-4DAE-AF07-2FDC0EB64663.html.

162. The '784 Infringing Instrumentalities' camera system receives a sentry mode trigger (*e.g.*, "exception event") indicating suspicious activity occurring near the vehicle, wherein the system is configured to process measured inputs received from a plurality of vehicle sensors (*e.g.*, ultrasonic sensors or cameras) (*e.g.*, "a plurality of sensing devices").

Sentry Mode

When Sentry Mode is turned on, the cameras and sensors remain powered on and ready to record suspicious activity around your vehicle when Model 3 is locked and in Park.

To turn Sentry Mode on or off, touch **Controls > Sentry**.

Alternatively, you can use voice commands or the Tesla mobile app. To enable Sentry Mode using voice commands, say "Keep Tesla safe," "Keep my car safe," "Sentry on," or "Enable Sentry" (see [Using Voice Commands](#)).

Ultrasonic Sensors

Effectively double the range with improved sensitivity using uniquely coded signals. These sensors are useful for detecting nearby cars, especially when they encroach on your lane, and provide guidance when parking.



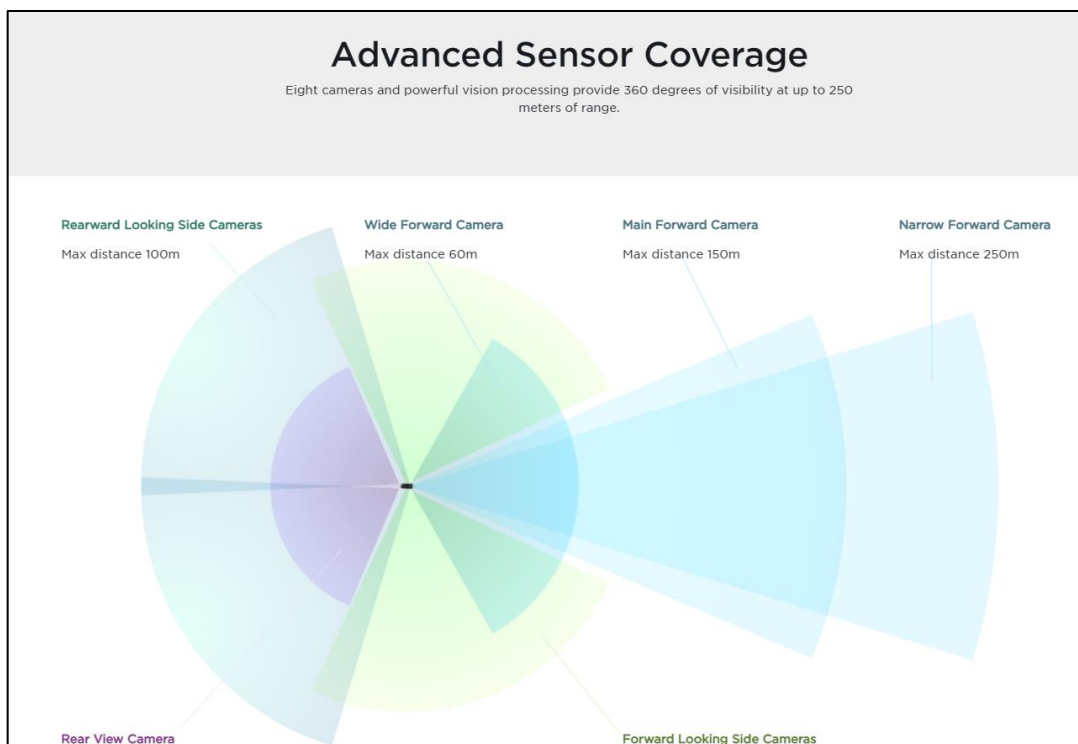
Using Sentry Mode

When Sentry Mode is turned on, the cameras and sensors remain powered on and ready to record suspicious activity around your vehicle when Model X is locked and in Park.

To store and retrieve Sentry Mode footage, ensure that Dashcam is on and a properly formatted USB flash drive is inserted into a front USB port (preferably in the glovebox) (see [Using Dashcam on page 173](#)).

If you want Sentry Mode to automatically turn on every time you leave your vehicle, touch **Controls > Sentry Mode > On**. There are three additional settings for customization:

Tesla Model X User Manual (2020).





<https://www.tesla.com/autopilot>.

163. The '784 Infringing Instrumentalities' camera system determines the level of suspicious activity (*e.g.*, alert, alarm) based on the level of threat to the vehicle (*e.g.*, "type of exception event") based on data captured by the cameras.

Sentry Mode



Note

Depending on market region, vehicle configuration, options purchased, and software version, your vehicle may not be equipped with Sentry Mode or the features may not operate exactly as described. It is your sole responsibility to consult and comply with all local regulations and property restrictions regarding the use of cameras.

When enabled, your vehicle's cameras and sensors (if equipped) remain powered on and ready to record suspicious activity around your vehicle when Model 3 is locked and in Park. Think of Sentry Mode as an intelligent vehicle security system that alerts you when it detects possible threats nearby.

If a threat is detected, Sentry Mode pulses the headlights, sounds the alarm, and displays a message on the touchscreen indicating that the cameras may be recording to inform individuals outside of the vehicle. You will receive an alert on your phone through the mobile app and footage of the event is saved to USB drive (if installed).

Sentry Mode is disabled by default. You can use voice commands or the Tesla mobile app to easily enable or disable Sentry Mode. To enable Sentry Mode using voice commands, say "Keep Tesla safe," "Keep my car safe," "Sentry on," or "Enable Sentry" (see [Voice Commands](#)).

https://www.tesla.com/ownersmanual/model3/en_us/GUID-56703182-8191-4DAE-AF07-2FDC0EB64663.html.

164. The '784 Infringing Instrumentalities store metadata with the captured video, wherein the metadata comprises the type of recording (*e.g.*, Sentry, Dashcam).

Viewing Video Recordings

If footage is saved, you can view the clips on the touchscreen or a computer.

When the USB drive runs out of storage space, video footage can no longer be saved. To prevent the USB drive from getting full, regularly move saved videos to another device and delete them from the USB drive.

Viewing on the Touchscreen

You can view recorded footage on the touchscreen when Model 3 is in Park. Touch the Dashcam icon located in the app launcher, or the Dashcam icon on the **Controls** screen. Touch the menu icon in the top corner of the screen. The tabs display a list of all video clips, organized by location and timestamp. Pause, rewind, fast forward, and delete clips as needed.

Navigate to **Controls > Safety > Delete Dashcam Clips** to delete all Dashcam and Sentry Mode footage.



Note

Dashcam recording pauses when you launch the Viewer.

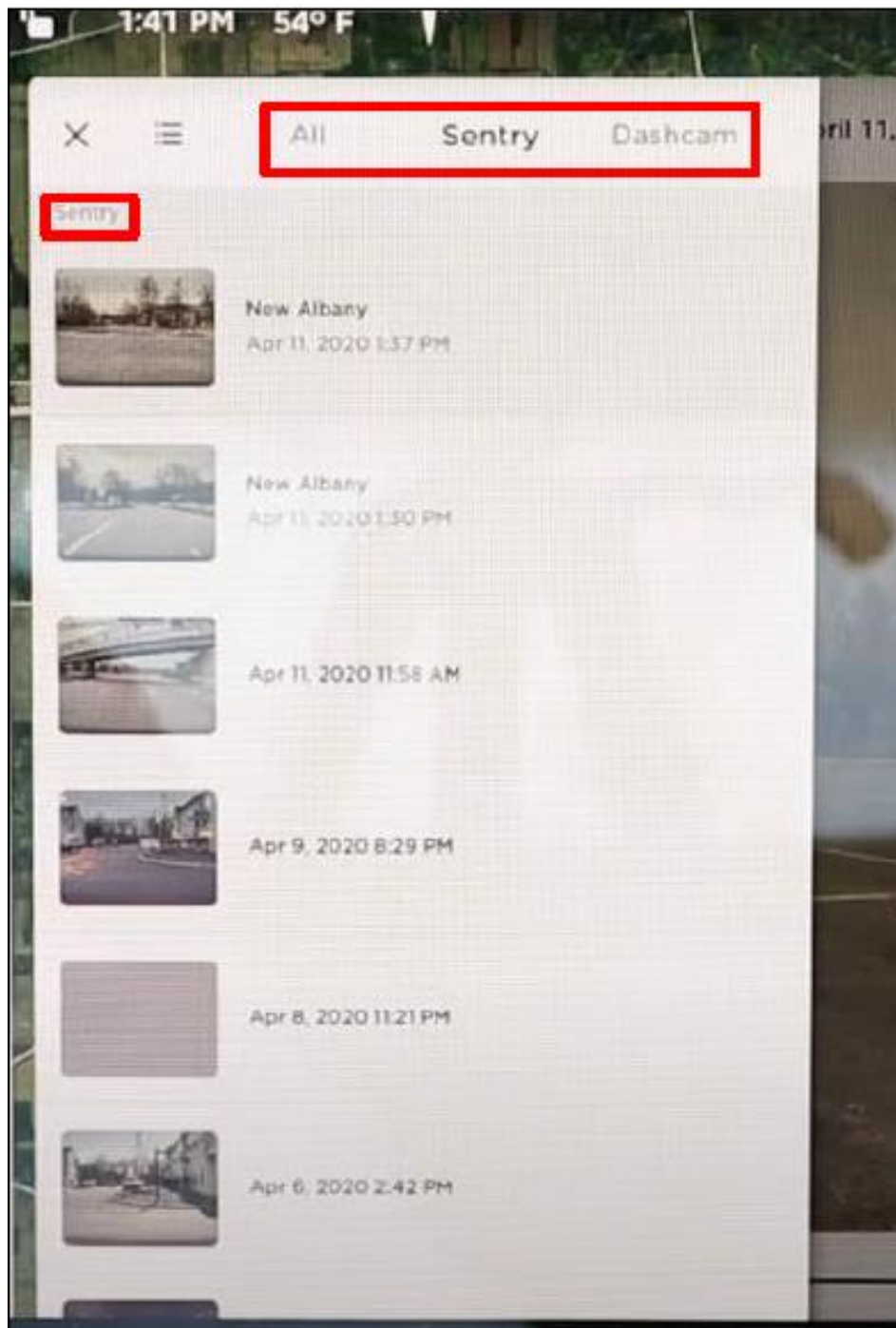
Viewing on a Computer

Insert the USB drive into a computer and navigate to the TeslaCam or TeslaTrackMode (if equipped) folder.

The TeslaCam folder contains sub-folders:

- **Saved Clips:** Contains all recordings that are saved using Dashcam.

https://www.tesla.com/ownersmanual/model3/en_us/GUID-F311BBCA-2532-4D04-B88C-DBA784ADEE21.html.



https://www.youtube.com/watch?v=G1cZ0M5Z_ag.

165. The '784 Infringing Instrumentalities provide warnings (*e.g.*, headlights flicker, security alarm triggered) in response to a sentry mode trigger

(e.g., “response to the exception event”).

Sentry Mode



Note

Depending on market region, vehicle configuration, options purchased, and software version, your vehicle may not be equipped with Sentry Mode or the features may not operate exactly as described. It is your sole responsibility to consult and comply with all local regulations and property restrictions regarding the use of cameras.

When enabled, your vehicle's cameras and sensors (if equipped) remain powered on and ready to record suspicious activity around your vehicle when Model 3 is locked and in Park. Think of Sentry Mode as an intelligent vehicle security system that alerts you when it detects possible threats nearby.

If a threat is detected, Sentry Mode pulses the headlights, sounds the alarm, and displays a message on the touchscreen indicating that the cameras may be recording to inform individuals outside of the vehicle. You will receive an alert on your phone through the mobile app and footage of the event is saved to USB drive (if installed).

Sentry Mode is disabled by default. You can use voice commands or the Tesla mobile app to easily enable or disable Sentry Mode. To enable Sentry Mode using voice commands, say "Keep Tesla safe," "Keep my car safe," "Sentry on," or "Enable Sentry" (see [Voice Commands](#)).

https://www.tesla.com/ownersmanual/model3/en_us/GUID-56703182-8191-4DAE-AF07-2FDC0EB64663.html.

- **Alert.** If Sentry Mode detects a possible threat, such as someone very close to, or leaning on, Model X, Sentry Mode switches to the Alert state, where:
 - Headlights briefly flicker.
 - The touchscreen displays a message indicating that cameras are recording.
 - Sentry Mode saves the most recent 10 minutes of footage prior to the triggered event to the USB flash drive (if available and installed).
- **Alarm.** For major threats, Sentry Mode:
 - Activates the security alarm and the audio system generates a loud and unexpected sound.
 - Sends an alert to the mobile app on phones that are paired to Model X to inform you that the alarm state is triggered.
 - Saves the most recent 10 minutes of footage prior to the triggered event to the USB flash drive (if available and installed).
 - Returns to the Standby state after 30 seconds.
 - For vehicles manufactured after approximately April 2018: Saves up to two minutes of footage to the vehicle's internal storage for safekeeping which can be manually saved to a USB flash drive (if available and installed) using the Dashcam viewer.

Tesla Model X User Manual (2020).

166. Tesla received notice of infringement of the '784 Patent on March 4, 2022. Since receiving notice, and since MPV filed this suit, Tesla has not modified the accused instrumentality or its instructions to end users to avoid infringement.

167. Consistent with Tesla's published descriptions and instructions, normal operation of the '784 Infringing Instrumentalities performs each and every step and satisfies each and every element recited in each asserted claim of the '784

Patent including claim 25 either literally or under the doctrine of equivalents.

168. Having knowledge or willful blindness to the fact that the third-party infringers' use of the '784 Infringing Instrumentalities in their intended manner practice at least claim 25 of the '784 Patent, Tesla has made no effort to avoid infringement and continues actively encouraged the third-party infringers to directly infringe the '784 Patent by making, using, testing, selling, offering for sale, importing and/or licensing the accused Tesla products, and by, for example: marketing them to third-party infringers; supporting and managing the third-party infringers' use; and providing technical assistance to the third-party infringers by, for example, publishing instructional information directing third-party infringers how to make and use the infringing products to practice one or more the infringing products to infringe at least claim of the '784 Patent.

169. Tesla has and continues to advertise and promote infringing features of the '784 Infringing Instrumentalities and encourage third-party infringers to operate the accused Tesla products in an infringing manner.

170. Tesla's end users, customers, and other third-party infringers follow Tesla's directions to practice the asserted claims of the '784 Patent.

171. With the requisite knowledge, specific intent, or willful blindness, Tesla specifically intended to induce, did induce, and continues to induce the third-party infringers to infringe at least claim 25 of the '784 Patent, by, for example,

publishing instructional information directing third-party infringers how to make and use the accused Tesla products to infringe claim 25 of the '784 Patent.

172. Encouraged and instructed by Tesla, third-party infringers acquired and operated the accused Tesla products to practice all limitations of the asserted claims of '784 Patent.

173. With the requisite knowledge, specific intent, or willful blindness, Tesla specifically intended to induce, and did induce, third-party infringers to infringe at least claim 25 of the '784 Patent. Tesla advised, encouraged, and aided third-party infringers to engage in direct infringement, including through its encouragement, advice, and assistance to the third-party infringers to use the infringing Tesla products.

174. Tesla has induced infringement and continues to induce infringement under 35 U.S.C. § 271(b) of at least claim 25 of the '784 Patent.

175. By no later than March 4, 2022, Tesla knew that the '784 Infringing Instrumentalities are made and operate in a manner that satisfies all limitations of at least claim 25 of the '784 Patent.

176. Tesla's infringing conduct with respect to the '784 Patent has been undertaken intentionally and willfully. Having refused to take a license to lawfully practice the '784 Patent, Tesla made the business decision to "efficiently infringe" the '784 Patent. In so doing, Tesla willfully infringed the '784 Patent.

177. MPV has been damaged by Tesla's acts of direct and indirect infringement and is entitled to recover the damages sustained in an amount subject to proof at trial, which, by law, can be no less than a reasonable royalty, together with interest and costs as fixed by this Court, pursuant to 35 U.S.C. § 284.

**COUNT 7:
INFRINGEMENT OF U.S. PATENT NO. 8,665,345**

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

179. MPV is the owner, by assignment, of U.S. Patent No. 8,665,345, titled "Video Summary Including a Feature of Interest."

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

181. The United States Patent and Trademark Office issued the '345 Patent on March 4, 2014, after a full examination that concluded in allowance of subject matter found to be in compliance with Title 25 of the United States Code.

182. Tesla has and continues to directly infringe at least claim 16 of the '345 Patent by using (including its own testing), making, selling, offering for sale, licensing, and/or importing Tesla automobiles (collectively, the "'784 Infringing Instrumentalities") without authorization or license as exemplified

below.

183. Exemplary infringing Tesla automobiles include the Tesla Models S, 3, X, and Y.

184. Each of the '345 Infringing Instrumentalities satisfies each and every element of each asserted claim of the '345 Patent either literally or under the doctrine of equivalents.

185. Claim 16 recites an embodiment of the claimed subject matter:

16. A method comprising:

receiving a video sequence including a time sequence of image

frames;

specifying reference data separate from a reference in the received

video sequence, wherein the reference data indicates a feature of

interest, and wherein the reference data includes information

specifying a desired characteristic of the image frames;

using a data processor to automatically analyze the image frames

using a feature recognition algorithm to identify a subset of the

image frames that contain the feature of interest and have the

desired characteristic;

forming a video summary including fewer than all of the image

frames in the video sequence, wherein the video summary

includes at least part of the identified subset of image frames containing the feature of interest and having the desired characteristic; and storing a representation of the video summary in a processor-accessible storage memory.

186. The '345 Infringing Instrumentalities include a Sentry Mode that receives a live camera feed of the vehicle's surroundings (*e.g.*, "video sequence including a time sequence of image frames").

Note
View Live Camera requires premium connectivity and version 4.2.1 (or newer) of the Tesla mobile app installed on a phone that has been paired as a key to Model 3.

When Sentry Mode is enabled, use the mobile app to remotely view the area surrounding Model 3 as seen through the exterior cameras. To enable, touch **Controls > Safety > Sentry Mode > View Live Camera via Mobile App** on the touchscreen to see what Sentry Mode records in real-time. Ensure there are no occupants in the vehicle and all doors are locked. Then, on the mobile app, navigate to **Safety > Sentry Mode > View Live Camera**.

When **View Live Camera** is actively in use, Model 3 periodically flashes its exterior lights and displays a message on the touchscreen to notify others that the area surrounding the vehicle is being viewed through the cameras.

View Live Camera is limited to approximately one hour (or 15 minutes for some regions) of cumulative usage per day.

If Model 3 is equipped with a pedestrian warning speaker (see [Pedestrian Warning System \(if equipped\)](#)), you can press and hold the microphone button on the mobile app to transmit your voice through this speaker.

You can also enable Dog Mode at the same time and switch the live camera view to see through the interior camera on the mobile app. See [Keep Climate On, Dog, and Camp](#) for more information. This feature is not supported in vehicles with Autopilot computer 2.0 or 2.5. Touch **Controls > Software > Autopilot computer** to find out which computer your vehicle has.

https://www.tesla.com/ownersmanual/model3/en_us/GUID-56703182-8191-

[4DAE-AF07-2FDC0EB64663.html#CONCEPT_AL1_BRJ_3RB](https://www.tesla.com/ownersmanual/model3/en_us/GUID-56703182-8191-4DAE-AF07-2FDC0EB64663.html#CONCEPT_AL1_BRJ_3RB).

187. The '345 Infringing Instrumentalities specify suspicious activity (*e.g.*, “reference data separate from a reference in the received video sequence”), wherein suspicious activity indicates motion occurring near the vehicle (*e.g.*, “feature of interest”), and wherein the suspicious activity specifies a possible threat detected (*e.g.*, “desired characteristic of the image frames”).

When enabled, your vehicle's cameras and sensors (if equipped) remain powered on and ready to record suspicious activity around your vehicle when Model 3 is locked and in Park. Think of Sentry Mode as an intelligent vehicle security system that alerts you when it detects possible threats nearby.

If a threat is detected, Sentry Mode pulses the headlights, sounds the alarm, and displays a message on the touchscreen indicating that the cameras may be recording to inform individuals outside of the vehicle. You will receive an alert on your phone through the mobile app and footage of the event is saved to USB drive (if installed).

Sentry Mode is disabled by default. You can use voice commands or the Tesla mobile app to easily enable or disable Sentry Mode. To enable Sentry Mode using voice commands, say “Keep Tesla safe,” “Keep my car safe,” “Sentry on,” or “Enable Sentry” (see [Voice Commands](#)).

When **Camera-Based Detection** is enabled, Sentry Mode uses the vehicle's external cameras in addition to vehicle sensors to detect a security event while parked. If disabled, your vehicle only saves clips to the USB drive if a physical threat is detected. To adjust, touch **Controls > Safety > Sentry Mode > Camera-Based Detection**.

[https://www.tesla.com/ownersmanual/model3/en_us/GUID-56703182-8191-](https://www.tesla.com/ownersmanual/model3/en_us/GUID-56703182-8191-4DAE-AF07-2FDC0EB64663.html#CONCEPT_AL1_BRJ_3RB)

[4DAE-AF07-2FDC0EB64663.html#CONCEPT_AL1_BRJ_3RB](https://www.tesla.com/ownersmanual/model3/en_us/GUID-56703182-8191-4DAE-AF07-2FDC0EB64663.html#CONCEPT_AL1_BRJ_3RB).

Tilt/Intrusion sounds the alarm in your vehicle if Model 3 detects motion inside the cabin, or is moved or tilted (for example, with a tow truck or jack). To enable, touch **Controls > Safety > Tilt/Intrusion**.

The intrusion sensor automatically disables in situations where the climate control system is operating when you leave your vehicle. To override, you can manually turn the Tilt/Intrusion Sensor on again after choosing Keep Climate On, Dog, or Camp Mode.

The tilt/intrusion sensor automatically re-enables at the start of every drive cycle.

https://www.tesla.com/ownersmanual/model3/en_us/GUID-94B0E05E-F642-4C8E-8FED-E5EB45FA27DA.html.

188. The '345 Infringing Instrumentalities use a processor to automatically analyze the image frames using a feature recognition algorithm to identify a subset of the image frames that contain motion occurring near the vehicle and include a possible threat detected. The '345 Infringing Instrumentalities then form clips from the live video feed (e.g., a video summary) including the image frames containing motion near occurring near the vehicle and include a possible threat detected. Furthermore, the '345 Infringing Instrumentalities store representations of the video summaries in a memory that is accessible via the Tesla multimedia interface.

Viewing Video Recordings

If footage is saved, you can view the clips on the touchscreen or a computer.

When the USB drive runs out of storage space, video footage can no longer be saved. To prevent the USB drive from getting full, regularly move saved videos to another device and delete them from the USB drive.

Viewing on the Touchscreen

You can view recorded footage on the touchscreen when Model 3 is in Park. Touch the Dashcam icon located in the app launcher, or the Dashcam icon on the **Controls** screen. Touch the menu icon in the top corner of the screen. The tabs display a list of all video clips, organized by location and timestamp. Pause, rewind, fast forward, and delete clips as needed.

Navigate to **Controls > Safety > Delete Dashcam Clips** to delete all Dashcam and Sentry Mode footage.

Note

Dashcam recording pauses when you launch the Viewer.

Viewing on a Computer

Insert the USB drive into a computer and navigate to the TeslaCam or TeslaTrackMode (if equipped) folder.

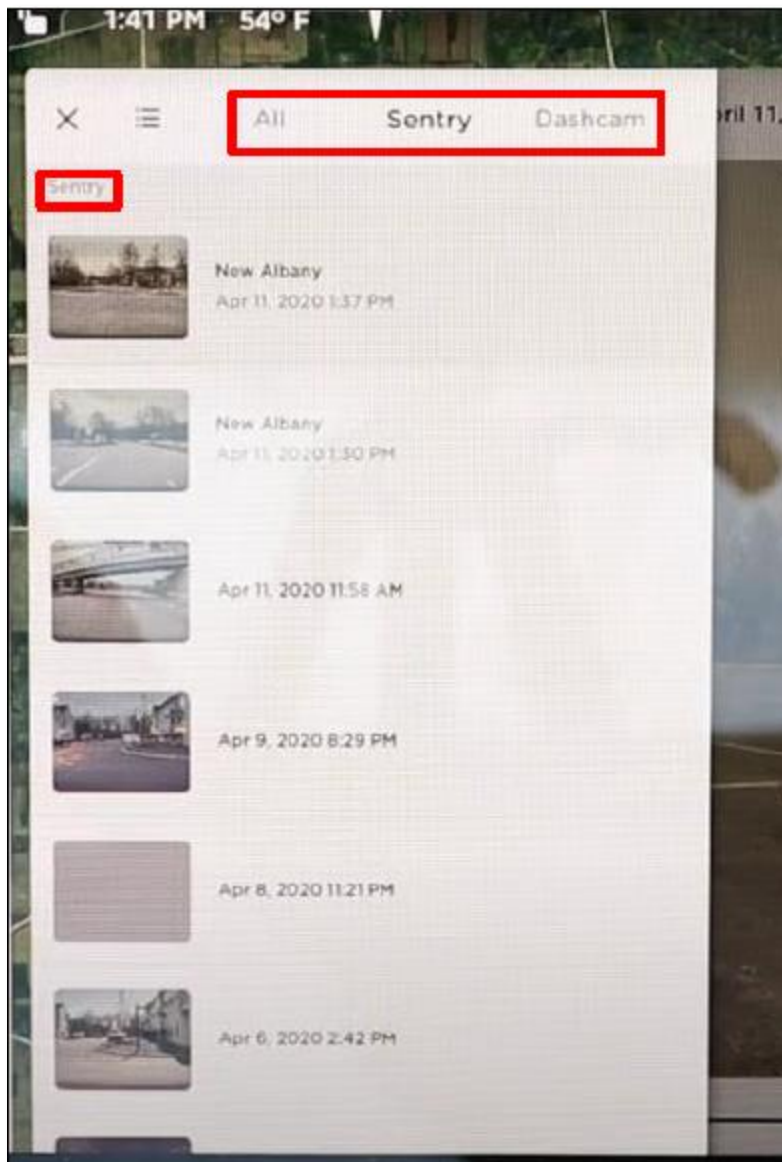
The TeslaCam folder contains sub-folders:

- **Saved Clips**: Contains all recordings that are saved using Dashcam.

https://www.tesla.com/ownersmanual/model3/en_us/GUID-F311BBCA-2532-4D04-B88C-DBA784ADEE21.html.

When **Camera-Based Detection** is enabled, Sentry Mode uses the vehicle's external cameras in addition to vehicle sensors to detect a security event while parked. If disabled, your vehicle only saves clips to the USB drive if a physical threat is detected. To adjust, touch **Controls > Safety > Sentry Mode > Camera-Based Detection**.

https://www.tesla.com/ownersmanual/model3/en_us/GUID-56703182-8191-4DAE-AF07-2FDC0EB64663.html.



https://www.youtube.com/watch?v=GlcZ0M5Z_ag.

189. Tesla received notice of infringement of the '345 Patent no later than the filing date of MPV's Original Complaint. Since MPV filed this suit, Tesla has not modified the accused instrumentality or its instructions to end users to avoid infringement.

190. Consistent with Tesla's published descriptions and instructions, normal operation of the '345 Infringing Instrumentalities performs each and every step and satisfies each and every element recited in each asserted claim of the '345 Patent including claim 16 either literally or under the doctrine of equivalents.

191. Having knowledge or willful blindness to the fact that the third-party infringers' use of the '345 Infringing Instrumentalities in their intended manner practice at least claim 16 of the '345 Patent, Tesla has made no effort to avoid infringement and continues actively encouraged the third-party infringers to directly infringe the '345 Patent by making, using, testing, selling, offering for sale, importing and/or licensing the accused Tesla products, and by, for example: marketing them to third-party infringers; supporting and managing the third-party infringers' use; and providing technical assistance to the third-party infringers by, for example, publishing instructional information directing third-party infringers how to make and use the infringing products to practice one or more the infringing products to infringe at least claim of the '345 Patent.

192. Tesla has and continues to advertise and promote infringing features of the '345 Infringing Instrumentalities and encourage third-party infringers to operate the accused Tesla products in an infringing manner.

193. Tesla's end users, customers, and other third-party infringers follow Tesla's directions to practice the asserted claims of the '345 Patent.

194. With the requisite knowledge, specific intent, or willful blindness, Tesla specifically intended to induce, did induce, and continues to induce the third-party infringers to infringe at least claim 16 of the '345 Patent, by, for example, publishing instructional information directing third-party infringers how to make and use the accused Tesla products to infringe claim 16 of the '345 Patent.

195. Encouraged and instructed by Tesla, third-party infringers acquired and operated the accused Tesla products to practice all limitations of the asserted claims of '345 Patent.

196. With the requisite knowledge, specific intent, or willful blindness, Tesla specifically intended to induce, and did induce, third-party infringers to infringe at least claim 16 of the '345 Patent. Tesla advised, encouraged, and aided third-party infringers to engage in direct infringement, including through its encouragement, advice, and assistance to the third-party infringers to use the infringing Tesla products.

197. Tesla has induced infringement and continues to induce infringement under 35 U.S.C. § 271(b) of at least claim 16 of the '345 Patent at least since November 2, 2023, the filing date of MPV's Original Complaint against Tesla.

198. By no later than receipt of MPV's Original Complaint, Tesla knew that the '345 Infringing Instrumentalities are made and operate in a manner that satisfies all limitations of at least claim 16 of the '345 Patent. Since the receipt of

MPV's Original Complaint, Tesla has made no changes to the '345 Infringing Instrumentalities that would remove it from the scope of the '345 Patent claims and continues to willfully infringe, both directly and indirectly, the '345 Patent.

199. Tesla's infringing conduct with respect to the '345 Patent has been undertaken intentionally and willfully at least since November 11, 2023, the filing date of MPV's Original Complaint against Telsa. Having refused to take a license to lawfully practice the '345 Patent, Tesla made the business decision to "efficiently infringe" the '345 Patent. In so doing, Tesla willfully infringed the '345 Patent.

200. MPV has been damaged by Tesla's acts of direct and indirect infringement and is entitled to recover the damages sustained in an amount subject to proof at trial, which, by law, can be no less than a reasonable royalty, together with interest and costs as fixed by this Court, pursuant to 35 U.S.C. § 284.

NOTICE

201. MPV does not currently distribute, sell, offer for sale, or make products embodying the Asserted Patents. Since receiving notice, and since MPV filed this suit, Tesla has not modified the accused instrumentality or its instructions to end users to avoid infringement.

202. MPV notified Tesla of infringement of the '684, '116, and '784 Patents on March 4, 2022, and the '461, '085, and '320 patents on May 27, 2022.

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

NOTICE OF REQUIREMENT OF LITIGATION HOLD

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

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

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

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

JURY DEMAND

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

PRAAYER FOR RELIEF

MPV prays for the following relief:

- a. That Tesla be summoned to appear and answer;
- b. That the Court enter an order declaring that Tesla has infringed each of the Asserted Patents.
- c. That the Court grant MPV judgment against Tesla for all actual, consequential, special, punitive, increased, and/or statutory damages, including, if necessary, an accounting of all damages; pre- and post-judgment interest as allowed by law; and reasonable attorneys' fees, costs, and expenses incurred in this action;
- d. That Tesla be found to have willfully infringed the Asserted Patents; and
- e. That MPV be granted such other and further relief as the Court may deem just and proper under the circumstances.

Dated: January 29, 2024

Respectfully submitted,

CONNOR LEE & SHUMAKER PLLC

By: 

Cabrach J. Connor
cab@CLandS.com;
Texas Bar No. 24036390
John M. Shumaker
john@CLandS.com
Texas Bar No. 24033069
Jennifer Tatum Lee
jennifer@CLandS.com
Texas Bar No. 24046950

609 Castle Ridge Road, Suite 450
Austin, Texas 78746
512.646.2060 Telephone
888.387.1134 Facsimile