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UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

MOTIVE TECHNOLOGIES, INC., a Delaware Corporation

Plaintiff,

v.

SAMSARA INC., a Delaware corporation

Defendant.

CASE NO. 3:24-cv-00902-JD

PLAINTIFF MOTIVE TECHNOLOGIES, INC.'S OPENING CLAIM CONSTRUCTION BRIEF UNDER PATENT L.R. 4-5(a)

Samsara EX1086
Samsara v. Motive
IPR2025-00574

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I. INTRODUCTION

The essence of claim construction is to bring clarity to terms (if indeed necessary), while staying true to the claim language and ensuring that the claims are interpreted as the inventor intended and those in the art would understand. The words of a patent should be given their "ordinary and customary meaning," which is "the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, *i.e.*, as of the effective filing date of the patent application." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005). When required, a specific construction is best determined from the intrinsic record, namely the patent itself and its file history. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996) ("It is well-settled that, in interpreting an asserted claim, the court should look first to the intrinsic evidence of record, *i.e.,* the patent itself, including the claims, the specification and, if in evidence, the prosecution history . . . . Such intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language."). Claim construction is not an exercise in complicating clear and well-understood terms with vague and ambiguous redefinitions or paraphrasing the terms in an impermissible attempt to support non-infringement or invalidity arguments. Particularly forbidden is the importation of limitations from preferred embodiments—a "cardinal sin" of claim construction absent the patentee's clear intention for the claims to be so limited. *See, e.g.*, *Largan Precision Co.* v. *Motorola Mobility LLC*, No. 21-cv-09138-JSW, 2024 U.S. Dist. LEXIS 83237, at *20 (N.D. Cal. May 7, 2024) ("Motorola's proposal . . . asks the Court to commit the "'cardinal sin' of claim construction by importing limitations from the written description into the claims.") (citing *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1324 (Fed. Cir. 2002)).

II. LEGAL PRINCIPLES

Claim construction "'is simply a way of elaborating the normally terse claim language in order to understand and explain, but not to change, the scope of the claims.'" *Gart v. Logitech, Inc.*, 254 F.3d 1334, 1339 (Fed. Cir. 2001) (quoting *Embrex, Inc. v. Serv. Eng'g Corp.*, 216 F.3d 1343, 1347 (Fed. Cir. 2000)). The purpose of claim construction is to discern "how a person of ordinary skill in the art would understand the claim terms." *Phillips*, 415 F.3d at 1323.

Intrinsic evidence, which includes the patent's claims, specification, and prosecution history, is

the primary focus of the claim construction inquiry. *Phillips,* at 1312-17. Claim construction always begins with the words of the claim. *See Z4 Techs., Inc. v. Microsoft Corp.*, 507 F.3d 1340, 1348 (Fed. Cir. 2007); *Teleflex Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1324 (Fed. Cir. 2002). This is because the claims define the scope of the claimed invention. *Phillips*, 415 F.3d at 1312.

In addition to the claim language, a claim should also be construed in a manner consistent with the patent's specification. *Merck & Co. v. Teva Pharms. USA, Inc.*, 347 F.3d 1367, 1371 (Fed. Cir. 2003) ("claims must be construed so as to be consistent with the specification, of which they are a part"). Typically, the specification is the best guide for construing the claims. *See Phillips*, 415 F.3d at 1315 ("The specification is ... the primary basis for construing the claims."); *Vitronics Corp.*, 90 F.3d at 1582 ("the specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term").

Although a patent specification often describes specific embodiments of the invention, claims should not be limited to those embodiments. *See Phillips*, 415 F.3d at 1323. It is generally impermissible to read limitations of a disclosed embodiment into the claims. *Callicrate v. Wadsworth Mfg., Inc.*, 427 F.3d 1361, 1368 (Fed. Cir. 2005) ("if we once begin to include elements not mentioned in the claim, in order to limit such claim ... we should never know where to stop") (quoting *Phillips*, 415 F.3d at 1312); *JVW Enters., Inc. v. Interact Accessories, Inc.*, 424 F.3d 1324, 1335 (Fed. Cir. 2005) (a court does "not import limitations into claims from examples or embodiments appearing only in a patent's written description, even when a specification describes very specific embodiments of the invention or even describes only a single embodiment") (internal citations omitted); *SRI Int'l v. Matsushita Elec. Corp. of Am.*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (*en banc*) ("It is the *claims* that measure the invention.") (emphasis in original).

A final source of intrinsic evidence is the prosecution record and any statements made by the patentee to the PTO regarding the scope of the invention. *See Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995) (*en banc*).

Of secondary importance is extrinsic evidence, such as expert and inventor testimony, dictionaries, and treatises, which "can be useful in claim construction" but generally not accorded as much weight as the intrinsic record. *Phillips,* 415 F.3d at 1317-19. That is because "the proper construction of any claim language must, among other things, 'stay[] true to the claim language.'" *Straight Path IP Group v. Sipnet EU S.R.O.*, 806 F.3d 1356, 1361 (Fed. Cir. 2015) (quoting *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998)).

A disputed claim term should be construed in a manner consistent with its "ordinary and customary meaning," which is "the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, *i.e.*, as of the effective filing date of the patent application." *Phillips*, 415 F.3d at 1312–13. The ordinary and customary meaning of a claim term may be determined solely by viewing the term within the context of the claim's overall language. *See id.* at 1314 ("the use of a term within the claim provides a firm basis for construing the term").

There are only two exceptions to this rule of applying plain meaning: (1) "when a patentee sets out a definition and acts as his own lexicographer," or (2) "when the patentee disavows the full scope of a claim term either in the specification or during prosecution." *Thorner v. Sony Computer Ent. Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). A patentee seeking to be its own lexicographer "must clearly express that intent in the written description" with "sufficient clarity to put one reasonably skilled in the art on notice that the inventor intended to redefine the claim term." *Merck & Co. v. Teva Pharms. USA, Inc.*, 395 F.3d 1364, 1370 (Fed. Cir. 2005); *Teleflex*, 299 F.3d at 1325 (in the absence of an express intent to define a claim term in the specification, the term carries its ordinary and customary meaning). "To disavow claim scope, the specification must contain expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope." *Cont'l Circuits LLC v. Intel Corp.*, 915 F.3d 788, 797 (Fed. Cir. 2019) (citation omitted).

III. PATENTS AT ISSUE

The following Motive patents are at issue for claim construction in this brief: U.S. Patent Nos. 11,875,580 (the '580 patent) and 12,136,276 (the '276 patent).

A. The '580 and '276 Patent Summaries

The '580 patent (Exhibit A[1]) and the '276 patent (Exhibit B) share the same specification and the same title: "Camera Initialization for Lane Detection and Distance Estimation using Single-View Geometry." The inventors of the '580 and '276 patents found a problem with prior art automotive systems for detecting objects on the road, which required use of "[m]ultiple cameras or sensors [that] may be installed in a vehicle to detect objects." Ex. A at 1:10-11. The problem was that "use of multiple cameras" or proximity sensors "such as Radar and Lidar" was too expensive. Ex. A at 1:11-14. Instead, monocular cameras could provide a more cost-effective approach, but their use "require[d] the location of the camera to be predefined or preset." Ex. A at 1:14-16.

To address these deficiencies, the '580 and '276 patents describe various examples for "using a monocular camera (e.g., an image sensor) that may be retrofitted and adjustable within the vehicle such as, the vehicle's dashboard." Ex. A at 1:21-23. To increase ease of use and avoid the need to have a predefined or preset camera location, the invention provides for "initializing such a camera onboard a vehicle." Ex. A at 1:28-29. "Upon driving, the camera initializes itself to determine its height with respect to the ground as well as a road plane normal. Thus, the camera may be installed in various positions and later re-initialized or recalibrated as needed." Ex. A at 1:24-27.

Both patents are directed to using initial image frames recorded by a dashcam to detect artifacts in those initial recorded image frames which are used to calibrate the dashcam so it can more accurately estimate the distance of objects and detect lanes that appear in image frames recorded by the dashcam after it has been calibrated.

The '580 patent is directed to a calibration method which uses one or more lines in the image frames of a video recorded by a camera device to calibrate that camera device. The '580 patent does this by "identifying one or more lines in the video using a predictive model," "computing at least one camera parameter based on those one or more lines," "overlaying the one or more lines on the video," "receiving

[1] Unless otherwise noted, all Exhibit citations in the text refer to the Exhibits A-D to the Declaration of Kyle D. Chen.

confirmation indicating that the one or more lines are accurate," and "transmitting data representing the at least one camera parameter to the camera device."

The '276 patent is directed to a calibration method which uses a horizon line detected in the image frames of a video recorded by a camera device to calibrate that camera device. The '276 patent does this by "detecting a horizon line in the image of a roadway" where the image is "recorded by a camera device installed in the vehicle," "overlaying a line on the image," giving the opportunity to modify the overlayed line so that it can be "a new line at a second position," "computing a camera parameter using the new line," and "transmitting data representing the camera parameter to the camera device."

The proposed constructions are for the following claim elements:

- claim element: "camera parameter" referenced in the '580 and '276 patents,
- claim element: "an image of a roadway recorded by a camera device" referenced in '276,
- claim element: "predictive model" referenced in '580,
- the order of steps referenced in claim 1 of '580,
- the order of steps referenced in claims 1, 8, and 15 of '276.

The '580 patent:

The '580 patent contains 3 independent and 17 dependent claims, all directed to the same method of calibrating a camera device by analyzing artifacts in initial image frames recorded by that camera device.

Motive is asserting claims 1-7 of the '580 patent. Below are the asserted claims from the '580 patent that contain the claim elements proposed for construction (terms for construction in **boldface**):

1. A method comprising:

receiving, over a network from a camera device, a video comprising a set of image frames;

identifying one or more lines in the video using a predictive model, the one or more lines including a horizon line;

computing at least one camera parameter based on the one or more lines;

overlaying the one or more lines on the video to generate an overlaid video;

transmitting the overlaid video to an annotator device for manual review;

receiving a confirmation from the annotator device, the confirmation indicating that the one or more lines are accurate; and

transmitting data representing the at least one camera parameter to the camera device.[2]

3. The method of claim 1, wherein computing the at least one **camera parameter** comprises predicting the at least one **camera parameter** using the **predictive model**.

4. The method of claim 1, wherein computing the at least one **camera parameter** comprises predicting the at least one **camera parameter** using a second **predictive model**.

5. The method of claim 1, wherein the at least one **camera parameter** comprises a camera height and road plane normal.

6. The method of claim 1, further comprising:

receiving, over the network from the camera device, a second video comprising a second set of images;

transmitting the second video to the annotator device for manual review;

adding, by the annotator device, one or more lines to the second video to generate a second overlaid video;

predicting, using the one or more lines in the second overlaid video, at least one **camera parameter**; and

transmitting the at least one **camera parameter** to the annotator device.

7. The method of claim 6, further comprising:

receiving a second confirmation from the annotator device, the second confirmation indicating that the at least one **camera parameter** are accurate; and

transmitting data representing the one or more lines of the second video to the camera device.

The ’276 Patent:

The ’276 patent contains 3 independent and 17 dependent claims, all directed to methods of calibrating a camera device by analyzing artifacts in initial image frames recorded by that camera device.

[2] All emphases are added in this paper unless otherwise noted.

Motive is asserting claims 1-20 of the '276 patent. Below are the asserted claims from the '276 patent that contain the claim elements proposed for construction (terms for construction in **boldface**):

1. A method comprising:

receiving an image of a roadway recorded by a camera device installed within a vehicle;

detecting a horizon line in the image;

overlaying a line on the image to generate an overlaid image;

transmitting the overlaid image to a computing device over a network;

receiving a modification of the line from the computing device, the modification comprising a new line at a second position;

computing a camera parameter based on the new line; and

transmitting data representing the camera parameter to the camera device.

2. The method of claim 1, wherein the **camera parameter** comprises one of camera height, viewing angle, and road plane normal.

7. The method of claim 1, wherein transmitting the data representing the **camera parameter** to the camera device further comprises recomputing the **camera parameter** based on the modification of the line.

8. A non-transitory computer-readable storage medium for tangibly storing computer program that, when executed by a computer processor, perform operations of:

receiving an image of a roadway recorded by a camera device installed within a vehicle;

detecting a horizon line in the image;

overlaying a line on the image to generate an overlaid image;

transmitting the overlaid image to a computing device over a network;

receiving a modification of the line from the computing device, the modification comprising a new line at a second position;

computing a camera parameter based on the new line; and

transmitting data representing the camera parameter to the camera device.

9. The non-transitory computer-readable storage medium of claim 8, wherein the **camera**

parameter comprises one of camera height, viewing angle, and road plane normal.

14. The non-transitory computer-readable storage medium of claim 8, wherein transmitting the data representing the **camera parameter** to the camera device further comprises recomputing the **camera parameter** based on the modification of the line.

15. A device comprising:

a processor; and

a storage medium for tangibly storing thereon program logic for execution by the processor, the program logic comprising logic for:

receiving an image of a roadway recorded by a camera device installed within a vehicle;

detecting a horizon line in the image;

overlaying a line on the image to generate an overlaid image;

transmitting the overlaid image to a computing device over a network;

receiving a modification of the line from the computing device, the modification comprising a new line at a second position;

computing a camera parameter based on the new line; and

transmitting data representing the camera parameter to the camera device.

20. The device of claim 15, wherein transmitting the data representing the **camera parameter** to the camera device further comprises recomputing the **camera parameter** based on the modification of the line.

IV. ARGUMENT

A. **"camera parameter"** ('580 claims 1 and 3-7; and '276 claims 1, 2, 7, 8, 9, 14, 15, and 20)

Motive's Proposal	**Samsara's Proposal**
"value(s) associated with one or more operating characteristics of a camera"	"property of the camera itself"

Motive proposes a claim construction for "camera parameter" based on language in the '580 specification, while Samsara is restricting the term to only a "property of the camera itself" despite the contrary language in the claims and the specification.

As an initial matter, nothing in the patent limits a "camera parameter" to be an "intrinsic parameter" or "property" of the camera itself. To the contrary, the specification common to both '580 (Exhibit A) and '276 (Exhibit B) gives multiple examples of camera parameters *extrinsic* to the camera, such as:

- height of the camera ('580 patent: 1:30, 1:43, 4:27, 6:46, 11:15, claims 5 and 10) ('276 patent: 1:37, 1:50, 4:35, 6:54, 11:26, claims 2 and 9)
- viewing angle of the camera relative to the roadway ('580 patent: 1:31, 1:43, 4:26, 11:15) ('276 patent: 1:38, 1:50, 4:35, 11:26, claims 2 and 9)
- ground plane normal vector ('580 patent: 1:32) ('276 patent: 1:39)
- road plane normal vector ('580 patent: 1:32, 1:43-44, 4:27-28, 11:15-16, claims 5 and 10) ('276 patent: 1:39, 1:50-51, 4:35, 11:26-27, claims 2 and 9)
- IPM (Inverse Perspective Mapping) ('580 patent: 6:46) ('276 patent: 6:54)

Furthermore, neither the specification nor the claims of '580 or '276 mention solely intrinsic camera parameters or properties, but rather describe parameters extrinsic to the camera such as those above, in the context of the claim, that are external to the camera or viewed by the camera, to facilitate the camera's initial configuration in the vehicle.

Samsara's proposal that "camera parameter" be limited to only a property of the camera itself is not supported by the teachings of the '580 and '276 patents or the context of the claim.

For this claim element, a person of ordinary skill in the art ("POSITA") (who is defined in Exhibit D at ¶¶ 12-13) would have understood it to mean "value(s) associated with one or more operating characteristics of a camera," because it is fully supported by patents' specification and does not limit the claim like Samsara's proposed construction does. (*See id.* at ¶¶ 47-51.)

B. "an image of a roadway recorded by a camera device" ('276 claims 1, 8, and 15)

Motive's Proposal	**Samsara's Proposal**
"a video, or video frames [of a roadway recorded by a camera device]"	Plain and ordinary meaning

Samsara's "plain and ordinary meaning" proposal is attempting to limit the word "image" to a static picture based on the word *in isolation*. But Samsara's attempt is not supported by the specification

nor is it feasible in the context of the overall language in the claims. *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1361 (Fed. Cir. 2008) ("A determination that a claim term 'needs no construction' or has the 'plain and ordinary meaning' may be inadequate when a term has more than one 'ordinary' meaning or when reliance on a term's 'ordinary' meaning does not resolve the parties' dispute."). Rather, Motive is proposing a claim construction for "an image of a roadway recorded by a camera device" based on how the whole phrase is repeatedly defined and consistently used in the '276 specification. The specification repeats the following sentence (10:13-15; 11:10-13; 12:19-20 and 49-51) which fully supports Motive's construction: "the image or set of images can comprise a video or video frames." This sentence clearly means that:

- the image can comprise a video, or
- the image can comprise video frames, or
- the set of images can comprise a video, or
- the set of images can comprise video frames.

Furthermore, the specification repeatedly uses the term "image frames," implying that an "image" (singular) comprises "frames" (plural); *see*, *e.g.*, Abstract, 1:45, 1:62, 2:7, 4:17, and 15:60. Thus, in defining "an image of a roadway recorded by a camera device," a POSITA would have understood it to mean "a video, or video frames [of a roadway recorded by a camera device]" as made clear by the '276 patent's specification and the context of the claims themselves. (*See* Exhibit D at ¶¶ 87-89.)

Claim 3 recites the method of claim 1, claim 10 recites storage medium of claim 8, and claim 16 recites the device of claim 15. Claims 3, 10, and 16 each state "wherein receiving the image of the roadway comprises receiving an image of the roadway while the vehicle is moving." This repeated statement which describes that the "vehicle is moving" further makes clear that the recited "image" in claims 1, 8, and 15 is a "video, or video frames" as proposed by Motive. (*See id.* at ¶ 90.)

Claim 4 recites the method of claim 3, claim 11 recites the storage medium of claim 10, and claim 17 recites the device of claim 16. Claims 4, 11, and 17 each state "wherein receiving the image of the roadway while the vehicle is moving comprises detecting that the vehicle is traveling above a pre-defined speed or for a pre-defined duration." This repeated statement which describes that the "vehicle is traveling

a pre-defined speed or for a pre-defined duration" further makes clear that the recited "image" in claims 1, 8, and 15 is a "video, or video frames" as proposed by Motive. (*See* Exhibit D at ¶ 91.)

C. "predictive model" (Motive's '580 claims 1, 3, and 4)

Motive's Proposal	Samsara's Proposal
"model that predicts values using non-geometric calculation"	Plain and ordinary meaning[3]

Motive is proposing a claim construction for "predictive model"—a term of art—supported by the '580 patent's claim language, specification, and prosecution history. The phrase cannot merely be given its "plain and ordinary meaning" without an express construction, as Samsara proposes, because of a prosecution history disclaimer. *Regents of the Univ. of Minn. v. AGA Med. Corp.*, 717 F.3d 929, 942 (Fed. Cir. 2013) ("When an applicant tells the PTO that a prior art reference lies outside the scope of his claim, he is bound by that argument."); *O2 Micro,* 521 F.3d at 1361 (Fed. Cir. 2008) ("A determination that a claim term 'needs no construction' or has the 'plain and ordinary meaning' may be inadequate . . . when a term has more than one 'ordinary' meaning or when reliance on a term's 'ordinary' meaning does not resolve the parties' dispute.").

As an initial matter, the "predictive model" is described and claimed as predicting multiple types of values, representing a variety of "lines," "lane and horizon markers," or "camera parameters." Copious evidence from the claims and specification confirms that this is so:

- Claim element 1[b]. "***identifying one or more lines*** *in the video* ***using a predictive model****, the one or more lines including a horizon line*"
- '580 specification at 1:39-40 – "***identifies one or more lines*** *in the video* ***using a predictive model***"
- '580 specification at 5:26-27 – *"****detects lane and horizon lines*** *in the video* ***using a predictive model****"*
- '580 specification at 5:29-31 – *"a* ***predictive model****, such as a CNN or other type of deep learning model* ***to identify lane and horizon markers****"*

[3] On March 5, 2026, Samsara changed its claim construction proposal for "predictive model" from "a deep learning or other AI model trained to identify the one or more lines" to "plain and ordinary meaning."

- Claim 3. "*The method of claim 1, wherein computing the at least one camera parameter comprises* ***predicting the at least one camera parameter using the predictive model***"
- Claim 4. "*The method of claim 1, wherein computing the at least one camera parameter comprises* ***predicting the at least one camera parameter using a second predictive model***"
- '580 specification at 4:29-31 – "***predictive models*** *(e.g., as depicted in FIGS. 3 A and 3B)* ***to generate camera parameters***"

(*See* Exhibit D at ¶¶ 60-61.)

But based on the '580 specification and its prosecution history, the "predictive model" embodiment described and claimed in the '580 patent uses non-geometric calculation. The specification of the '580 patent explains that the disclosed "[s]ystems can use the illustrated neural network in some embodiments **instead of a geometric process** to determine lane and horizon lines" ('580 at 7:14-16), and furthermore explains that "since the model is capable of predicting the horizon line directly, previous requirements of having three lane lines in frame **(e.g., to geometrically calculate a horizon line) can be relaxed**" ('580 at 8:39-46) (emphasis added). Motive's "non-geometric" construction of "predictive model" in the claims is supported by the prosecution history because claims 1-3, 5, 8-12, and 14-15 were rejected as being unpatentable over U.S. Pub. No. 2019/0034740 ("Kwant1") and U.S. Pub. No. 2019/0102674 ("Kwant2"). *See* File History of U.S. Patent No. 11,875,580 (Exhibit C) at 0131. In response to the rejection, the applicants noted that Kwant1's predictive model does not predict a horizon, but instead only predicted lane lines:

> *"Kwant1 does not disclose using a predictive model to detect a horizon line. Instead, Kwant1 describes predicting lane lines.* ***Kwant1 then describes extending these lane lines and, using a geometric approach****, identifying the horizon line. Kwant1 only describes using predictive modeling to predict lane lines. Thus, Kwant1 does not describe predicting a horizon line as claimed".*

(Ex. C at 0145-0146.) The Examiner of the '580 patent's application allowed claims 1-20 after concluding that the claimed features were "not found or suggested in the prior art" (*id.* at 0171). One element of the allowed claims was "identifying one or more lines in the video using a predictive model, the one or more

lines including a horizon line" (*id.* at 0171). Thus, the examiner necessarily concluded that the claims recited a non-geometric approach to "predicting a horizon line" as claimed.

As further support for this conclusion, the file wrapper shows that earlier in his allowance (*id.* at 0170), the examiner noted that the passage from Kwant1 which the examiner had earlier considered as prior art for the application's "the one or more lines including a horizon line" claim element was the following passage from Kwant1: "determining a horizon line in the image at which a maximum number of the one or more extended road lanes crosses over a minimum horizontal extent of the horizontal line" (*id.* at 0170). A POSITA would understand that this passage from Kwant1 describes a geometric calculation; that is, extending road lane lines until they cross. (*See* Exhibit D at ¶¶ 68-72.)

It is clear from the prosecution record that by allowing claims 1-20, the examiner explicitly concluded that Kwant1's predictive model geometric calculation of a horizontal line is not prior art to the '580 patent application's claimed predictive model calculation of a horizon line. As a result, the '580 patent's predictive model cannot be construed to include geometric calculations, as that methodology was surrendered during prosecution. *See Thorner,* 669 F.3d at 1365. Samsara's proposed construction is at direct odds with the prosecution history and should not be adopted.

Because the "predictive model" of '580 is limited to non-geometric calculations, is not limited to identifying one or more lines, and is not limited to a trained model, a POSITA would have understood "predictive model" to mean a "model that predicts values using non-geometric calculation." (*See* Exhibit D at ¶¶ 73-74.)

D. The order of the following method steps of the '580 patent:

"[a] receiving, over a network from a camera device, a video comprising a set of image frames;

[b] identifying one or more lines in the video using a predictive model, the one or more lines including a horizon line;

[c] computing at least one camera parameter based on the one or more lines;

[d] overlaying the one or more lines on the video to generate an overlaid video;

[e] transmitting the overlaid video to an annotator device for manual review;

[f] receiving a confirmation from the annotator device, the confirmation indicating that the one or more lines are accurate;

[g] and transmitting data representing the at least one camera parameter to the camera device" (claim 1 of the '580 Patent)

Motive's Proposal	Samsara's Proposal
Plain and ordinary meaning	Step [b] must be performed after step [a] Step [c] must be performed after step [b] Step [d] must be performed after step [b] Step [e] must be performed after step [d] Step [f] must be performed after step [e] Step [g] must be performed after steps [c] and [f]

For the steps of '580 claim 1, Motive is proposing the plain and ordinary meaning for the order of its steps, while Samsara is proposing a specific order of its steps. Neither the other claims of '580 nor its specification or file history imposes such ordered dependencies. *Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1345 (Fed. Cir. 2008) ("[A]s a general rule [a method] claim is not limited to performance of the steps in the order recited, unless the claim explicitly or implicitly requires a specific order.") (citing *Interactive Gift Express, Inc. v. Compuserve Inc.,* 256 F.3d 1323, 1342–43 (Fed. Cir. 2001)). Therefore, the only evidence for these dependencies would have to come from the language of claim 1 itself, but such language does not exist.

For example, Samsara proposes that step [g] must be performed after step [f]. But the language of claim 1 does not require that order—as a matter of plain English, the transmission in step [g] does not depend on the confirmation in step [f]:

- Step [f]: "receiving a confirmation from the annotator device, the confirmation indicating that the one or more lines are accurate"
- Step [g]: "transmitting data representing the at least one camera parameter to the camera device"

There is no element in step [g] that is dependent upon an element in step [f]. Step [g] does not call for anything from step [f] to do its "transmitting … to the camera device" or for "data representing the at least one camera parameter." Furthermore, step [f] only mentions "a confirmation" and "the annotator

device," and neither a confirmation nor the annotator device are used in step [g]. There is no principled reason that the two steps could not be reversed in order while still embodying the same invention.

The only mentions in the specification of a dependency between "receiving a confirmation from the annotator device, the confirmation indicating that the one or more lines are accurate" (step [f]) and "transmitting data representing the at least one camera parameter to the camera device" (step [g]) are to different embodiments, and importing unclaimed limitations from the specification into the claims is improper, *JVW Enters., Inc.,* 424 F.3d AT 1335.

That Samsara is seeking to import limitations from the specification is evident from the Joint Claim Construction Statement (the "JCCS," ECF 157-1 at 4-5), where, in support of its proposed construction, Samsara cites to specification sections 1:36-2:8 and 5:21-7:10, as below:

- at 1:50-52 – "*Once the horizon line is confirmed, the system returns the camera parameters to the calling party (e.g., a camera onboard a vehicle).*"
    - However, the paragraph in which this statement is made starts with the phrase "In a first embodiment, …," and the next two paragraphs start with the phrases "In a second embodiment, …" and "In a third embodiment, …." Therefore, this dependency is only mentioned in an embodiment.
- at 6:5-10 – "*If the annotator confirms the overlaid lines, the annotator can accept the lines and transmit its acceptance back to the camera initialization service 232 in transmission 222. In response, the camera initialization service 232 can then transmit the generated camera parameters back to the device 230 in transmission 224.*"
    - However, the paragraph in which this statement is made starts with the phrase "In an embodiment, …." Therefore, this dependency which describes Figs 2 is only mentioned in an embodiment.
- at 7:1-4 – "Alternatively, if the annotator confirms that the horizon and/or camera parameters are accurate, the annotator device 234 can transmit the camera parameters to the camera initialization service 232 in transmission 226"
    - However, this statement is made in a paragraph that is preceded by the phrase "In one embodiment, …." Therefore, this dependency which describes Fig. 2 is only mentioned in an embodiment.

As is clear from Samsara's own JCCS citations, the specification does not require any specific order of all method steps, and when a specific order of only two steps is mentioned, it is in the context of alternate possible embodiments, not an absolute limitation. Because there is no required order of steps described in the patent, nor is one evident or necessary from a reading of the claims, Samsara's construction requires an impermissible importation of an alternative embodiment into the claims and should be rejected. (*See* Exhibit D at ¶¶ 52-58.)

E. The order of the following method steps of the '276 patent:

"[a] receiving an image of a roadway recorded by a camera device installed within a vehicle;

[b] detecting a horizon line in the image;

[c] overlaying a line on the image to generate an overlaid image;

[d] transmitting the overlaid image to a computing device over a network;

[e] receiving a modification of the line from the computing device, the modification comprising a new line at a second position;

[f] computing a camera parameter based on the new line;

[g] and transmitting data representing the camera parameter to the camera device"

(claims 1, 8, 15 of the '276 Patent)

Motive's Proposal	**Samsara's Proposal**
Plain and ordinary meaning	Step [b] must be performed after step [a] Step [c] must be performed after step [b] Step [d] must be performed after step [c] Step [e] must be performed after step [d] Step [f] must be performed after step [e] Step [g] must be performed after step [f]

For the steps of '276 claims 1, 8, and 15, Motive is proposing the plain and ordinary meaning for the order of its steps, while Samsara is proposing a specific order of its steps. As with the '580 patent discussed above which shares the identical specification, neither the claims of '276 nor the specification imposes such an ordered dependency. Therefore, the only evidence for these dependencies would have to come from the language of claim 1 itself. None exists.

For example, Samsara proposes that step [c] must be performed after step [b]. However, the language of claim 1 does not require those two steps to be performed in sequence. Here is the language of both steps [b] and [c], which are identical for claims 1, 8, and 15:

- Step [b]: "*detecting a horizon line in the image*"
- Step [c]: "*overlaying a line on the image to generate an overlaid image*"

No element in step [c] is dependent upon an element in step [b]. For example, step [c] does not require anything from step [b] to "generate an overlaid image." Step [c] only requires "overlaying ***a*** line," not (as Samsara urges) the "horizontal line" detected in step [b]. Indeed, step [c] does not require that the line it is "overlaying" to be a horizontal line at all.

The only mentions in the specification of a dependency between "*detecting a horizon line in the image*" (step [b]) and "*overlaying a line on the image to generate an overlaid image*" (step [c]) are within Samsara's broad JCCS citations (ECF 157-1 at 5-7) of alternative embodiments, as described in specification sections 1:36-2:8 and 5:21-7:10, below:

- at 1:51-52 – "T*he system then overlays the computed horizon line on the video.*"
    - However, the paragraph in which this statement is made starts with the phrase "In a first embodiment, …," and the next two paragraphs start with the phrases "In a second embodiment, …" and "In a third embodiment, …." Therefore, this dependency is only mentioned in an embodiment.
- at 5:56-58 – "*process 206 overlays the computed lane and horizon lines on the original video file, generating an overlaid video file.*"
    - However, the paragraph in which this statement is made starts with the phrase "In an embodiment, …." Therefore, this dependency which describes Figs 2 is only mentioned in an embodiment.
- at 5:61-62 – "*process 206 can only overlay a horizon on the original video file as part o f generating an overlaid video file.*"

- However, the paragraph in which this statement is made starts with the phrase "In an embodiment, …." Therefore, this dependency which describes Figs 2 is only mentioned in an embodiment.

As is clear from Samsara's own Joint Claim Construction Statement citations (Dkt. 157-1, pp. 5-7 of 14), the specification does not require any specific order of all method steps, and when a specific order of only two steps is mentioned, it is in the context of alternate possible embodiments, not an absolute limitation. Because there is no required order of steps described in the patent, nor is one evident or necessary from a reading of the claims, Samsara's construction requires an impermissible importation of an alternative embodiment into the claims and should be rejected. (*See* Exhibit D at ¶¶ 80-86.)

V. CONCLUSION

For at least the above reasons, Motive's proposed claim constructions should be adopted.

Respectfully submitted,

Dated: March 12, 2026

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