

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

EYESMATCH LTD.,

Plaintiff,

v.

SAMSUNG ELECTRONICS CO., LTD., and
SAMSUNG ELECTRONICS AMERICA, INC.

Defendants.

Case No. 2:23-cv-00363-JRG-RSP

DEFENDANTS' RESPONSIVE CLAIM CONSTRUCTION BRIEF

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TABLE OF EXHIBITS

<u>Exhibit No.</u>	<u>Description</u>
1	Declaration of Dr. Harley R. Myler, Ph.D. Regarding Claim Construction
2	Plaintiff EyesMatch Ltd.'s Technical Tutorial
3	European Search Report for European Patent Application No. EP2936439 (dated May 7, 2016)
4	EyesMatch's Claim Amendments for European Patent Application No. EP2936439 (dated August 16, 2016)
5	EyesMatch's Claim Amendments for European Patent Application No. EP2936439 (dated April 23, 2018)
6	MATHWORKS, <i>Geometric Transformation Types for Control Point Registration</i> , available at https://www.mathworks.com/help/images/geometric-transformation-types-for-control-point-registration.html

I. INTRODUCTION

There are nine disputed claim terms in U.S Patent Nos. 8,982,109 (the “’109 Patent”) (Dkt. No. 42-2) and 8,982,110 (the “’110 Patent”) (Dkt. No. 42-3) (together, the “Asserted Patents”). Defendants’ Samsung Electronics Co. and Ltd., Samsung Electronics America, Inc. (together, “Samsung” or “Defendants”) proposed constructions are consistent with the claims and specification and accurately reflect the way a person of ordinary skill in the art (“POSA”) would have understood them.¹ Meanwhile, EyesMatch Ltd.’s (“EyesMatch” or “Plaintiff”) proposed constructions make the terms unbounded, read out expressly claimed terms to avoid indefiniteness, or assert a “plain and ordinary meaning” without explanation as to the scope of such construction. Samsung’s proposed constructions should be adopted.

II. OVERVIEW OF THE ASSERTED PATENTS

The Asserted Patents² are directed to a method for operating a system comprising a monitor, camera, and processor, “to display a mirror-mimicking image on the monitor.” ’109 Patent at claim 1. According to the Background of the Asserted Patents, prior art alternatives “are not convincing and are not accepted as a reliable image ... mainly because the image generated by a camera is very different from an image generated by a mirror.” *Id.* at 1:66-2:1. The user does not see himself at double the distance to the camera, as he would in a mirror. *Id.* at 2:4-10. Further, unlike a mirror, where the user sees himself at the same size as he moves closer or farther, the image displayed with a camera and screen appears larger as the user gets closer to the camera. *Id.*

¹ Samsung’s claim constructions are further supported by the un rebutted Decl. of Dr. Harley R. Myler, Ph.D. Regarding Claim Constr., Ex. 1 (“Myler”).

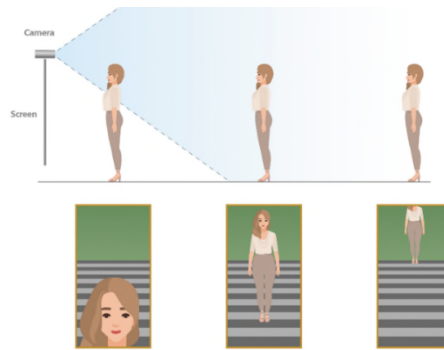
² The ’110 Patent incorporates by reference the disclosure of the ’109 Patent. *See* ’110 Patent at 1:65-2:2. The ’110 Patent stems from a patent application that is a continuation-in-part of the application that led to the ’109 Patent. Accordingly, the overview of the ’109 Patent, other than the claims, applies to the ’110 patent.

at 2:23-25. “This is mainly because the FOV [Field of View] of a camera is fixed and is determined mainly by the size of the camera lens, or focal length.” *Id.* at 2:25-27. In addition, unlike a mirror, “depending on the camera’s height, as the user gets closer to the camera, the user’s eyes may appear at different levels.” *Id.* at 2:31-33. Lastly, “[a]nother difference from a camera is that when one looks at a mirror, one’s image appears to be reversed....” *Id.* at 2:33-35.

Yet another significant problem with mimicking a mirror with a camera/display is that “[i]n an ideal situation” the camera would be placed behind the display and “be able to move on a parallel plane behind the screen, in correspondence with the user’s eye’s location to create a convincing eye-to-eye look experience.” *Id.* at 14:15-20; Fig. 6. But the Asserted Patents admit that this “ideal” solution is “not practical” and “may be too expensive and complex to implement,” “simply because [the display] will block the camera’s view.” *Id.* at 14:20-25; Fig. 6.³

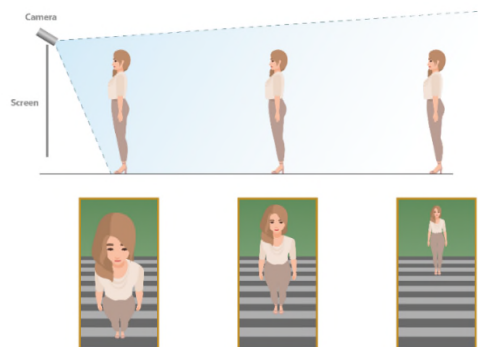
Accordingly, the Asserted Patents disclose details and embodiments to a “practical method” that “implement[s] the ideal system [of Figure 6]” but with “**cameras located at the perimeter of the screen and facing the user.**” *Id.* at 15:6-9; *id.* at 14:25-28 (“A simpler solution is to place the camera above the display screen and manipulate the captured image so as to mimic a mirror”); Myler, ¶49. But the “practical” embodiments discuss even more problems, including image distortion, with attempts to mimic a mirror with a camera and display. *Id.* at 15:12. As depicted below, Figure 7 of the ’109 Patent shows that in the “practical” embodiments “when the user is far the image is smaller and higher . . . and when the user is closer to the screen . . . the image of the user is larger and the FOV cuts the image of the user.” *Id.* at 15:13-23.

³ Unsurprisingly, there is no disclosure for this “theor[etical]”, “not practical,” and “complex” embodiment to enable POSA to practice this embodiment. See Myler, ¶51.



As depicted above, “when the user approaches the screen, a projection distortion becomes noticeable, *meaning that the user will not feel as if he is looking at himself in a mirror.*” *Id.* at 15:23-25. This projection distortion that makes the user “not feel as if he is looking at himself in a mirror” is created by the FOV cutting the image, and only a change to the FOV would solve this specific issue. *Id.* at 15:16-25.

Further, as shown in Figure 8 of the '109 Patent (depicted below), in the “practical” embodiment, because the camera is tilted downward from the top of the screen “the nature of the distortion is mainly projection distortion—the user looks shorter and upper body looks longer” and “the user also got smaller as he was further away.” *Id.* at 15:30-36.



To correct the specific distortion emphasized by Figure 8 would require “at least an elevation and tilt transformation—which amount to a [Point of View] POV modification.” Myler,

¶49. Thus, to solve the issues with the “practical” methods (*i.e.*, with the camera offset somewhere around the perimeter of the screen) the Asserted Patents describe that:

To enable generating **a convincing (augmented) mirror experience** from a camera a [sic] located in front of the user and **in spatial offset from the screen**, a computerized method is used to manipulate the captured image prior to its presentation on the screen. . . . The computerized method receives as an input the image captured by the camera and **performs a transformation of the image to correct the point of view and field of view** of the camera to fit with the view point that would occur with a conventional mirror.

’109 Patent at 15:41-52. Moreover, “[p]erforming an **adaptive POV and adaptive FOV prior to displaying the image on the screen results in an image that mimics a reflection of mirror** positioned at the location of the screen.” *Id.* at 16:2-5. Other transformations alone are **not enough** to mimic a reflection of a mirror. *Id.* at 15:59-61 (“[A]ttempting to solve the virtual mirror problem by only flipping the image vertically as was proposed in the prior art **is insufficient to create a mirror experience.**”); *see also* Myler, ¶¶52-53.

Beyond modifying the FOV and POV, the Asserted Patents disclose **optional** transformations “to obtain an even more convincing mirror experience” (’109 Patent at 16:5-6) such as “dynamic adaptive image stitching of [multiple] images” (*id.* at 16:9-10), “adaptive optical zoom” (*id.* at 16:27-29), “projection distortion . . . calculated in an analytical way based on user tracking,” (*id.* at 16:36-38), “image distortion [] measured in front of the screen,” (*id.* at 16:38-39), and “3D imaging [] implemented with two cameras” (*id.* at 25:34-35).

III. PERSON OF ORDINARY SKILL IN THE ART⁴

A person of ordinary skill in the art (“POSA”) in the field of art for the Asserted Patents would have a bachelor’s degree in electrical or computer engineering, or a related field such as

⁴ Although Plaintiff’s constructions presumably purport to construe the terms from the perspective of a POSA, Plaintiff fails to even identify who is the POSA. For this reason alone, Plaintiff’s constructions are deficient. Dkt. No. 42 at 1-3.

computer science, and two years of work experience with image capture and processing systems or related fields. *See* Myler, ¶29. A person with less and/or different education, but more relevant practical experience, or vice versa, may also meet this standard. *Id.*

IV. CLAIM CONSTRUCTION ARGUMENT

A. The preamble of Claim 1 of the '109 Patent is limiting

Defendants agree with Plaintiff that the preamble of Claim 1 of the '109 Patent is limiting.

B. “transformation mapping” (*also*, “mapping transformation”) ('109 Patent – Claims 1, 2, 3, 6, 7, 12, 13, 16; '110 Patent – Claims 1, 2)

<i>EyesMatch's Proposed Construction</i>	<i>Samsung's Proposed Construction</i>
A selected set of image transformations.	At least modifying the point of view (POV) and field of view (FOV) prior to displaying the image.

Plaintiff's construction is not a construction but *carte blanche* to apply “transformation mapping” as it sees fit. Plaintiff merely provides the circular argument that “‘transformation mapping’ denotes a ‘*selected*’ . . . set of image transformations.” Dkt. No. 42 (“Br.”) at 4. But the specification does not suggest or define that “transformation mapping *denotes a selected* . . . set of image transformations.” *Id.* Plaintiff never identifies what are the “selected” transformations, leaving the term completely unbounded. However, claim 1 of the '109 Patent requires “applying a transformation mapping to the image to modify the image *such that it appears to mimic the reflection of a mirror.*”⁵ And the specification is abundantly clear on what transformations are required to do so.

In no ambiguous terms, the '109 Patent's specification requires that to “mimic a mirror” the image must undergo a change in FOV and POV. '109 Patent at 16:2-5 (“Performing an adaptive POV and adaptive FOV prior to displaying the image on the screen results in an image

⁵ Similarly, claim 1 of the '110 Patent requires a “mapping transformation” “during mirror tracking mode.”

that mimics the reflection of a mirror.”); 15:48-52 (“The computerized method receives as an input the image captured by the camera and performs transformation of the image to correct the point of view [POV] and field of view [FOV] of the camera with the view point that would occur with a conventional mirror.”). Defendants’ construction also squares perfectly with the ’109 Patent’s explanation of the “projection distortions” innate with having a camera in the perimeter of the display, depicted in Figures 7 and 8.⁶ *See also supra* at §II.

Plaintiff is wrong to allege the “theor[etical]” and “too expensive and complex to implement” (’109 Patent at 14:20-25) solution shown in Figure 6 proves that only FOV transformations are required. The Figure 6 embodiment is not claimed because the provisional application from which Plaintiff alleges priority to the ’109 Patent unequivocally describes the “invention” as the “practical embodiment” with the camera(s) mounted in the periphery and thus disclaims other embodiments. Dkt. No. 42-5 (Provisional Application No. 61/738,957) at 14 (“***In this invention we disclose a practical method*** to implement the ideal system described above ***with a fixed mounted camera/cameras located at the perimeter of the screen***”). “[W]here the specification makes clear that the invention does not include a particular feature, that feature is deemed to be outside the reach of the claims of the patent.” *Chi. Bd. Options Exch., v. Int’l. Sec. Exch.*, 677 F.3d 1361, 1372 (Fed. Cir. 2012).⁷ Moreover, the ’109 Patent’s specification is teeming with disparagement of the embodiment (*e.g.*, “theor[etical]”, “not practical,” “too expensive and complex”) and praise for the practical embodiment. *Openwave Sys., Inc. v. Apple, Inc.*, 808 F.3d 509, 512 (Fed. Cir. 2015) (“[T]he specification of the patents-in-suit is rife with remarks that disparage and, therefore, disclaim mobile devices that incorporate computer modules.”); *see also*,

⁶ This embodiment, with camera(s) in the perimeter of the screen is the only one claimed as explained below.

⁷ Internal citations omitted unless otherwise noted.

Myler, ¶¶50-51. Therefore, **all embodiments** in the Asserted Patents suffer from projection distortion necessitating FOV and POV transformation to “mimic the reflection of a mirror.” Indeed, even if the Court does not find disavowal of the Figure 6 embodiment, this “not practical” setup requires both FOV and POV image transformations to mimic a mirror. Myler, ¶¶52-53.

Plaintiff’s claim differentiation arguments also fail. Plaintiff argues that Defendants’ claim construction for “transformation mapping” is incorrect because dependent claim 2 of the ’110 Patent recites “wherein the mapping transformation comprises a combination of at least two of the following transformations” some of which include a change in POV, some include a change in FOV, and one that does not require either (flipping about a vertical axis). Br. at 6. However, claim 1 **already expressly claims** a transformation mapping that includes both a change in FOV and POV, regardless of the language of claim 2. Claim 1 **requires** that “adaptive transformation mapping . . . generate modified images that appear to be captured from a different point of view the different point of view . . . correspond[ing] to an image taken from a different angle [*i.e.*, change in POV] and a different distance [*i.e.*, change in FOV].” ’110 Patent at claim 1. Plaintiff’s technical tutorial further confirms that resizing the image to appear as if taken from a different distance is a change in FOV. Ex. 2 (“Plaintiff’s Technical Tutorial”) at 19. The poorly drafted claims do not change the accuracy of Defendants’ construction supported by the specification. *Laitram Corp. v. Morehouse Indus., Inc.*, 143 F.3d 1456, 1463 (Fed. Cir. 1998) (“[A]lthough different claims should be presumed to cover different inventions, ‘if a claim will bear only one interpretation, similarity [with another claim] will have to be tolerated.’”). Similarly, Plaintiff alleges that dependent claim 3 of the ’109 Patent shows that Defendants’ construction is unduly narrow for including a change in FOV in its construction: “‘the transformation mapping comprises at least a tilt transformation and an elevation transformation’ – both of which describe modifying

the ... (POV).” Br. at 7. However, claim 1 expressly recites “resizing the image to reduce variations caused by changes in the objects distance to the camera” which Plaintiff’s tutorial confirms is a change in FOV. See Plaintiff’s Technical Tutorial at 19.

Plaintiff is wrong to argue that the other embodiments it cites support the argument that transformation mapping does not require at least a change in FOV and POV, as explained below:

- The embodiments related to factory calibration, Br. at 4-5 (citing ’109 Patent at 22:5-7), are specifically described as including POV transformations (e.g., resizing) and FOV transformations (e.g., XY translation). ’109 Patent at 21:31-22:26.
- Plaintiff argues “the claimed system can be used to generate images that appear to mimic a mirror, the specification describes an embodiment performing a scaling operation, which resizes the image and therefore modifies the FOV.” Br. at 8. However, the cited language (’109 Patent at 23:65-67) merely describes scaling as modifying FOV. Subsequent disclosure supports Defendants’ construction: “[i]n practice ... performing tilt [FOV translation], elevation, and scale [FOV translation] translations, provides a rather convincing image that only needs to be right-to-left reversed to very effectively *mimic a mirror*.” *Id.* at 24:4-8.
- Plaintiff quotes descriptions of specific types of transformations that could be used to perform either FOV or POV modifications,⁸ but nothing in these quotes states or suggests that a

⁸ “*See, e.g.*, 109 Patent at 23:44-24:3 (‘The parameters that **can be used** for the transformation include the following.’ (listing various possible transformations).” Br. at 8. “[*I*]d. at 29:38-40 (‘The transformation mapping **can be** one that **includes** angle, tilt, azimuth, scale, spatial translation (i.e., elevation linear offset or horizontal offset’) etc.” Br. at 8. “[*I*]d. at 29:51-54 (‘The transformation includes any combination of correction for angle, tilt, azimuth, scale, spatial translation (i.e., elevation linear offset or horizontal offset), etc.’)” Br. at 8. “[*I*]d. at 22:10-13 (‘... the mapping may include different transformations for each pixel or each section of the live image, so as to provide the best representation of a mirror reflection.’)” Br. at 8.

“transformation mapping” that “mimics a mirror” can be done with only one of a POV or an FOV transformation.

- Plaintiff cites to Provisional Patent Application No. 61/738,957 at EM_00000039. Br. at 8. This language was incorporated in the ’109 Patent at 17:49-54 and relates to a registration approach for calibrating a system embodiment using a human/doll target with circular stickers in locations such as the legs, chest, shoulders etc. *Id.* at 17:39-45. “[E]ach location” refers to each of the sticker locations. Nothing in the disclosure states that a “transformation mapping” that “mimics a mirror” can be done with only a POV or an FOV transformation.
- Finally, Plaintiff cites to the factory calibration language from the provisional application at EM 00000049. Br. at 9. But this language relates to factory calibration mapping to create the correct mapping for the user location. The amount of FOV and POV mapping is adjusted based on user location. Nothing in the section states that a “transformation mapping” that “mimics a mirror” can be done with only a POV or an FOV transformation.

In short, the specification unambiguously requires both a change in POV and FOV to mimic a mirror as claimed. Plaintiff’s citations to specific examples of POV and FOV transformations and how they can be calibrated or implemented does not change this conclusion.

C. “it appears to mimic a reflection of a mirror” (’109 Patent – Claims 1, 13, 16)

<i>EyesMatch’s Proposed Construction</i>	<i>Samsung’s Proposed Construction⁹</i>
Appears to mimic the image that would have reflected from a mirror, i.e., from a reflective surface.	An image where the user sees their reversed reflection appearing at approximately double the distance from the camera and the reflection maintains approximately the same size regardless of the user movement.

⁹ As explained below, Samsung proposes the addition of the word “approximately” to the construction to address Plaintiff’s concern that the construction requires “absolute fidelity to the optical characteristics of a mirror.” Br. at 10.

Plaintiff's construction broadens the claim language such that an image that appears to mimic a reflection from **any** "reflective surface," instead of just the claimed "mirror," falls within its scope. Under Plaintiff's construction, **any** such reflective surface, such as a polished metal or a car glass window, would meet the scope of the term even though the reflection may look **nothing** like a mirror. Plaintiff's construction is far from what the inventors described as "a convincing [] mirror experience" in the specification as discussed below (*see, e.g.*, '109 Patent at 15:41-45) and inappropriately attempts to broaden "mirror" to any reflective surface.

The '109 Patent emphasizes that prior art "techniques are not convincing and are not yet accepted as a reliable image of the individual as if he was looking at himself in a conventional mirror." '109 Patent at 1:65-2:1. This is why the '109 Patent purports to disclose "a camera and flat screen display to create **a convincing mirror appearance**"—far from the reflection of a generic "reflective surface" that Plaintiff misleadingly equates to a "mirror." *Id.* at 3:58-60.

As discussed, the '109 Patent details several of the key characteristics of a mirror to explain why prior art systems were not convincing. *Id.* at 1:63-2:40. First, the '109 Patent explains that conventional mirror images are reversed. *Id.* at 14:40-41. However, the '109 Patent makes clear that mimicking a mirror's reflection requires **more** than simply displaying a reversed image/video of a user. *Id.* at 15:59-61, 1:61-2:3. Moreover, the '109 Patent only discloses "mirroring" embodiments having reversed images (and no mirroring embodiments that don't). *See, e.g., id.* at 10:6-15, 10:19-22. The Asserted Patents indisputably claim the mirrored embodiments ("such that it appears to mimic the reflection of a mirror," '109 Patent at claim 1; "mirror tracking mode," '110 Patent at claim 1), and thus the images are reversed. If the claims recited the "non-mirrored" embodiments, which is not the case here, they would include a "non-reversed image."

Second, the '109 Patent describes that “when a user looks at himself in the mirror, what he actually sees is the reflection of himself as if he was standing at a distance that is **double the distance** from him to the mirror.” *Id.* at 2:4-6; *see also id.* at Figs. 5A and 5B, illustrating a user standing at a distance from a mirror (“D1” in Fig. 5A and “D2” in Fig. 5B) and seeing himself (i.e., his reflected “image”) at twice the distance from the mirror (2xD1 or 2xD2, respectively). Third, when describing conventional mirrors, the '109 Patent provides that “the angle of the user’s Field of View (FOV) changes when the user changes the distance, e.g., gets closer, to the mirror.” *Id.* at 2:10-12. “Consequently, as illustrated in FIG. 5B, when the user approaches [a conventional] mirror . . . he continues to see the **same size reflection . . . so that the user actually sees himself roughly at the same size**, but closer.” *Id.* at 2:19-23; *see also* 14:25-51.

Plaintiff misleadingly cherry picks the specification to argue that certain disclosed embodiments do not include the characteristics in Defendants’ construction. Plaintiff is wrong. For example, Plaintiff argues an embodiment “teaches that ‘when the user moves away or closer to the camera, the size of the user in the image projected on the monitor screen would remain about the same, thus mimicking the reflection on a mirror.’” Br. at 11 (citing '109 Patent at 30:8-11). However, this disclosure focuses on maintaining and displaying a constant image size based on the average distance between a user’s pupils, not on correcting other distortions necessary to mimic a mirror. *Id.* 29:59-30:14. Plaintiff does not identify any language stating that this embodiment can be performed in lieu of reversing the image or maintaining the same distance to the user, which, in view of the specification, a POSA would understand is required. *See, e.g., id.* at 23:60-67 (“**Another** important transformation for mimicking a mirror is scale . . . [to] reduce[] the effect of size change with distance.”); *id.* at 14:25-51. Thus, Defendants are not excluding this embodiment from the claim construction, contrary to Plaintiff’s allegations.

Plaintiff also complains that “Defendants’ construction would baselessly require absolute fidelity to the optical characteristics . . . [which] cannot be squared with the claim language, which recited only that the displayed image ‘appears to mimic a reflection of a mirror.’” Br. at 10. In support of its argument Plaintiff cites language describing an embodiment where the user maintains “about the same size” as he moves closer or further away. Br. at 11. Similarly Plaintiff complains that multiple embodiments only “estimate” the distance from a camera to a user thus “the construction cannot require that the reflection appear at exactly ‘double the distance from the camera.’” Br. at 12. However, Defendants’ construction does not require that the image be “exactly” the same size or at “exactly” twice the distance to the camera as Plaintiff alleges. Nonetheless, Defendants agree that the following construction is proper for “mimicking a mirror:” “an image where the user sees their reversed reflection appearing at *approximately* double the distance from the camera and the reflection maintains *approximately* the same size regardless of the user movement” should the Court find it more appropriate.

The list below addresses Plaintiff’s remaining arguments:

- Plaintiff argues “the specification teaches that ‘appear[ing] to mimic a reflection of a mirror’ can be accomplished with an image that is smaller than would be presented if actually reflected in a mirror.” Br. at 11 (citing 109 Patent at 21:1-6). But the quote states that the image does not need to represent true size. This is different from stating it does not maintain the size of the displayed image regardless of movement.
- Plaintiff states that ’109 Patent at 14:6-9 discusses “manipulating the image such that when it is projected on a screen it resembles a mirror image, i.e., an image the user would have seen if the screen was actually a standard mirror.” Br. at 12. But the quote introduces the embodiment further explaining that mimicking a mirror requires reversing the reflection and maintaining

the size of the user at double the distance to the camera, supporting Defendants’ construction.

’109 Patent at 14:25-51.

- Plaintiff quotes language confirming that a transformation mapping requires both a POV and FOV correction “to fit with the view point that would occur in a conventional mirror” to argue that doubling the distance and maintaining the same size is not required to mimic a mirror. *Id.* at 15:48-55.” Br. at 12. But as explained, a FOV transformation is needed to ***maintain the size and the distance of the subject***. Plaintiff then omits the language following the quote: “[A]ttempting to solve the virtual mirror problem by only flipping the image vertically as was proposed in the prior art is insufficient to create a mirror experience.” *Id.* at 15:59-61.

For these reasons, the Court should adopt Defendants proposed construction.

D. “determining distance to a user appearing in the [live video feed/image]” (’109 Patent – Claims 1 [live video feed], 11 [image])

<i>EyesMatch’s Proposed Construction</i>	<i>Samsung’s Proposed Construction</i>
Plain and ordinary meaning as understood by a person of ordinary skill in the art.	Determining the distance from the camera to a user appearing in the image.

Plaintiff states this term means “determining the distance from the camera to a user appearing in the image.” Br. at 13. Defendants agree and adopt this meaning for the term.¹⁰ Claims 1 and 11, when read as a whole, plainly require the determination of a distance between the user and camera that is used as input for: 1) resizing the image (“resizing the image to reduce variations caused by changes in ***object’s distance to the camera***,” *id.* at claim 1), 2) varying rate (“varying rate at which the non-ordered steps are performed on the series of images ***according to the distance***,” *id.* at claim 1), and 3) varying image resolution (“varying resolution of the image ***according to the distance***,” *id.* at claim 11). In fact, the sole embodiment that Plaintiff points to

¹⁰ Defendants originally proposed a different construction but to streamline this dispute, Defendants now propose a construction that Plaintiff appears to propose. See Br. at 13.

in support of its construction for “varying rate...” (Br. at 19-20) requires determining the distance between the user and the camera to update frequency of transformation parameter according to either: 1) the user’s “**set distance amount**” from the camera, e.g., “**25 cm**” (’109 Patent at 27:53-58) or 2) the user’s speed which includes the user’s change in distance, e.g., “**x cm/s**” (*id.* at 27:60-63).¹¹ A construction that does not determine a specific distance between the user and the camera plainly excludes this embodiment and is incorrect.

Defendants’ inclusion of “from the camera” is consistent with amendments EyesMatch made to a similar claim term in a related EP Application (EP2936439) to address the EPO’s complaint that the claim was unclear. *See* Ex. 3 (European Search Report) at ¶5 (“claims 8 and 14 are unclear **because it is not possible to determine from where the distance to the user is taken.**”); *See* Ex. 4 (2016 Claim Amendments) at 4 (amending claim 14 to recite “determine distance **from the camera** (14) to a user.”).

Notwithstanding, the parties’ apparent agreement that this term requires “determining the distance from the camera to a user appearing in the image” (Br. at 13), Defendants disagree that the embodiment Plaintiff relies on to support its construction (which simply compares the distance between a user’s pupils with an expected value, rather than determining a distance), corresponds to this term or even falls within the scope of the claims. Br. at 14; *SIMO Holdings Inc. v. Hong Kong uCloudlink Network, Tech. Ltd.*, 983 F.3d 1367, 1378-79 (Fed. Cir. 2021) (“Our precedent is replete with examples of subject matter that is included in the specification, but is not claimed.”).

¹¹ Plaintiff amended a related EP Application (EP2936439) corresponding to the “varying rate” limitation to include “determining movement speed or **movement distance** of a user,” further supporting the that a distance from the camera to a user must be determined. Ex. 5 (2018 Claim Amendments) at 4 (amending claim 14 to recite: “determining **movement speed** or **movement distance of a user** appearing in the live video feed, varying rate at which the non-ordered steps are performed on the series of images according to the movement speed or movement distance.”).

Rather than determining the distance from the camera to a user appearing in the image, the embodiment relied on by Plaintiff calculates the “**distance between the user’s eyes, i.e., interpupillary distance (IPD)**” by “identif[ying] the pupils in the image.” ’109 Patent at 29:64-30:5. The system compares this measured IPD with an “expected IPD” pre-programmed into the system (“95 percentile adult male in the USA has an IPD of 70 mm, while for females it is 65 mm,” *id.* at 29:65-67), and “**scale[s] the image so as to match the expected IPD.**” *Id.* at 30:3-5. Although the patent states that “the method further comprises calculating distance to a user appearing in the image by tracking the distance between the user’s eyes,” at no point does this embodiment disclose measuring, calculating, estimating, or otherwise determining the **distance from the camera to a user** appearing in the image. This is in contrast to other embodiments that do determine the distance from a camera to a user. *See, e.g., id.* at 14:55-56 (“[O]ptimization on FOV . . . will be done **based on user distance from each camera**”); *id.* at 16:27-29 (“The adaptive optical zoom enhances the image/video . . . based on distance tracking, i.e., **continuously tracking the distance to the user.**”).

E. “non-ordered steps” (’109 Patent – Claim 1)

<i>EyesMatch’s Proposed Construction</i>	<i>Samsung’s Proposed Construction</i>
Steps 1(b)-1(d)	Indefinite

The “non-ordered steps” term renders claim 1 indefinite because the term creates an irreconcilable inconsistency and yields a nonsensical result, thereby failing to provide notice of what is claimed. *See Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 909 (2014) (“a patent must be precise enough to afford clear notice of what is claimed”).¹²

¹² Deciding indefiniteness is appropriate during claim construction proceedings. *See, e.g., Traxcell Techs., LLC v. Huawei Techs. USA Inc.*, No. 2:17-CV-00042-RWS-RSP, 2019 WL 121966, at **14-15 (E.D. Tex. Jan. 7, 2019) (rejecting patentee’s contention that indefiniteness is an issue for

Claim 1 of the '109 patent requires a list of “non-ordered steps”:

1. A method for operating a system having a monitor, a camera, and a processor, so as to display a mirror-mimicking image on the monitor, by performing **non-ordered steps comprising**:

[a] obtaining a digital image from a camera;

[b] flipping the image about a vertical axis so as to reverse right and left sides of the image;

[c] applying a transformation mapping to the image to modify the image such that it appears to mimic a reflection of a mirror;

[d] resizing the image to reduce variations caused by changes in object’s distance to the camera;

[e] displaying the image on the monitor after performing the flipping, transformation mapping, and resizing;

wherein the non-ordered steps are performed on a series of images of a live video feed from the camera;

determining distance to a user appearing in the live video feed; and,

varying rate at which the non-ordered steps are performed on the series of images according to the distance.

'109 Patent at 30:51-67 (bracketed letters added). The claim expressly recites a list of non-ordered steps by claiming “**non-ordered steps comprising**” steps 1[a] through 1[e]. *Id.* at 30:52-62. It is black letter law that when a claim recites an element (i.e., “non-ordered steps”) “comprising” x, y, and z, that element must include each of x, y, and z. *Ricoh Co. v. Quanta Comput. Inc.*, 550 F.3d 1325, 1333 (Fed. Cir. 2008) (claim reciting “formatting method comprising the steps of” includes all claimed steps); *eTool Dev., Inc. v. Nat’l Semiconductor Corp.*, No. 2:08-CV-196-TJW, 2011 WL 4100456, at *17 (E.D. Tex. Sept. 13, 2011) (claim directed to “database comprising,” where “‘Comprising’ means ‘including’”). Claim 1 of the '109 Patent then refers back to the “non-

summary judgment and not appropriate at *Markman*, and then finding at *Markman* the claim term indefinite); *Omni MedSci, Inc. v. Apple Inc.*, No. 2:18-CV-00429-RWS, 2019 WL 3818762, at *13 (E.D. Tex. Aug. 14, 2019) (finding claims indefinite at *Markman*).

ordered steps” 1[a]-1[e] via a wherein clause stating “wherein the non-ordered steps are performed.” ’109 Patent at 30:62-63. The claim isolates the non-ordered steps 1[a]-1[e] by starting the list with “non-ordered steps comprising” and ending the list at “wherein the non-ordered steps.” ’109 Patent at 30:51-64; Myler, ¶82 (To a POSA, these “steps” do not need to be performed in a particular order.”).

But, the claim contradicts itself, making it inconsistent and nonsensical. First, step 1[a] provides the antecedent basis (i.e., “a digital image”) for “the image” in steps 1[b]-1[e]. ’109 Patent at 30:55-59. Second, step 1[e] recites “displaying the image on the monitor **after** performing the flipping, transformation mapping, and resizing” steps found in steps 1[b]-1[d]. ’109 Patent at 30:60-62. Consequently, steps 1[a] and 1[e] are plainly written to be both ordered and non-ordered steps (Myler, ¶¶ 82-83), creating an irreconcilable inconsistency and yielding a nonsensical result, rendering the claim indefinite. *Chef Am., Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 1374 (Fed. Cir. 2004) (when claim yields a nonsensical result, the claim is invalid); *Trs. of Columbia Univ. v. Symantec Corp.*, 811 F.3d 1359, 1367 (Fed. Cir. 2016) (“The claims are nonsensical in the way a claim to extracting orange juice from apples would be, and are thus indefinite.”).

EyesMatch’s position is the steps 1[a] and 1[e] are ordered, but that steps 1[b], 1[c], 1[d] are non-ordered. Br. at 16. EyesMatch’s position fails. As EyesMatch acknowledges, a method claim ordinarily includes steps without an ordering. *Interactive Gift Express, Inc. v. CompuServe Inc.*, 256 F.3d 1323, 1342-43 (Fed. Cir. 2000) (“Unless the steps of a method actually recite an order, the steps are ordinarily not construed to require one.”). Accordingly, “non-ordered steps” in the preamble would be superfluous if it only applied to steps 1[b], 1[c], and 1[d]. As such, EyesMatch’s claim interpretation cannot be correct. *Elekta Instrument S.A. v. O.U.R. Sci. Int’l*,

Inc., 214 F.3d 1302, 1307 (Fed. Cir. 2000) (rejecting claim interpretation that would render claim term superfluous). For steps 1[a] and 1[e], “non-ordered steps” in the preamble is ***not superfluous but actually limiting***. See *id*; Dkt. No. 42 at 3 (EyesMatch agreeing preamble is limiting). Here, the patentee affirmatively requires steps 1[a] and 1[e] to be “non-ordered steps” to limit the inherent order required within steps 1[a] (having an antecedent) and step 1[e] (having “after”). But, the patentee’s election to limit the claim to one that comprises “non-ordered steps” while also having an order inherent within steps 1[a] and 1[e] makes the claim irreconcilably inconsistent and nonsensical to a POSA. Myler, ¶83.

Under EyesMatch’s construction, the Court would need to delete “non-ordered steps” from the preamble to address the nonsensical result. But this rewrites the patentee’s version of the claim. The Federal Circuit “repeatedly and consistently has recognized that courts may not redraft claims, whether to make them operable or to sustain their validity.” *Chef Am.*, 358 F.3d at 1374 (collecting cases); *Trs. of Columbia Univ.*, 811 F.3d at 1367; *Allen Eng’g Corp. v. Bartell Indus., Inc.* 299 F.3d 1336, 1349 (Fed. Cir. 2002) (“semantic indefiniteness of claims is not rendered unobjectionable merely because it *could* have been corrected”) (emphasis in original). This District is in accord. “The logical inconsistency would be most easily resolved by the simple deletion of the word ‘only’ from step (2),” but “courts are not permitted to rewrite claim language.” *Michael S. Sutton Ltd. v. Nokia Corp.*, 647 F. Supp. 2d 737, 745 (E.D. Tex. 2009), *aff’d* 405 F. App’x 486 (Fed. Cir. 2010). Here, like in *Sutton*, the claim cannot “be logically performed giving meaning to ***all the words used in the claim.***” *Id.* The Court is bound to the claim language as written and cannot rewrite it, including where “the plain language yields a nonsensical result.” *Omni MedSci*, 2019 WL 3818762, at *13 (finding claims indefinite at *Markman*).

Contrary to EyesMatch’s position, it is well-settled Federal Circuit law that the specification does not allow a court to rewrite the claim to fix its nonsensical result and save it from invalidity. *Chef Am.*, 358 F.3d at 1374; *Elekta*, 214 F.3d at 1308 (“contradictory language in the written description” does not permit rewriting the plain claim language). In *Chef Am.*, the claims recited heating the “batter-coated dough” itself to 400° F, as opposed to the heating the oven to 400° F. 358 F.3d at 1373. The Court acknowledged that the dough “would be burned to a crisp” if it was heated to 400° F, as the claim instructs. *Id.* The Court also acknowledged the specification disclosed heating the dough to a “light, flaky, and crispy texture,” and certainly not to 400° F. *Id.* Regardless of the specification’s disclosure, the Court indicated that it cannot redraft claims “to make them operable or to sustain their validity,” and must take “the patentee’s version of the claim as he himself drafted it.” *Id.* at 1374.¹³

F. “varying rate at which the non-ordered steps are performed on the series of images” (’109 Patent – Claim 1)

<i>EyesMatch’s Proposed Construction</i>	<i>Samsung’s Proposed Construction</i>
Plain and ordinary meaning as understood by a person of ordinary skill in the art	“varying rate at which two or more of the non-ordered steps are performed on the series of images”

In an effort to streamline the dispute on this term,¹⁴ Samsung responds on one issue: varying the rate cannot mean varying the rate of **just one** of the non-ordered steps as EyesMatch currently proposes. Br. at 18. The plain language of the claim is clear. As EyesMatch concedes,

¹³ EyesMatch also suggests that flipping, transformation, and resizing are “performed on” an image, whereas obtaining the image or displaying it are not. This is incorrect. For example, for step 1[a] (“obtaining a digital image from a camera”), the specification discloses performance on the image by “extracting data from the image of camera,” whereby “the image of the user is separated from the background” and transferred to a binary image. ’109 Patent at 26:13-30; Fig. 14 (trigger event module (step 1450) “detects the user located in front of the camera,” and then at step 1462, the method will “separate user from the background and transfer to binary image”).

¹⁴ Samsung drops its indefiniteness position, and instead responds to EyesMatch’s position applying “varying the rate” to just one non-ordered step.

“claim construction begins and ends with the words of the claims.” Br. at 20. Here, the claim language recites “varying rate at which the non-ordered **steps are** performed.” The term “steps” is plural and the term “are” invokes the plural. Thus, based on the claim language alone, varying the rate of more than one step is required.

To skirt the claim language, EyesMatch manufacturers a “loop” theory that is not supported by law, much less the specification or the claims. Br. at 18-19; *supra*, §IV.E. EyesMatch argues that a “POSITA would understand that if the rate of performance of any one of the steps in the loops is varied, the rate at which that group of steps is performed is necessarily varied.” Br. at 19. The problem with EyesMatch’s theory is that the claim does not recite varying the rate for when a group or a loop “is” performed. The claim language requires the plural: varying rate at which the non-ordered **steps are** performed, and thus requires varying the rate on more than one step.

This inconsistency is highlighted when EyesMatch consistently refers to its “loop” and “group” theory in the singular. Br. at 18-19 (“loop is varied,” “group of steps is performed,” “loop is performed more slowly” “loop is performed more rapidly” “varying rate at which the group non-ordered steps is performed.”). EyesMatch’s theory that varying the rate of only one step (whether in a loop, or group, or on its own) contradicts the plain meaning of the claim requiring “varying rate at which the non-ordered **steps are** performed....” Myler, ¶¶73-74.

G. “performing registration of the digital image with the reference image” (’109 Patent – Claim 7)

<i>EyesMatch’s Proposed Construction</i>	<i>Samsung’s Proposed Construction</i>
Plain and ordinary meaning as understood by a person of ordinary skill in the art	Matching pointers on a captured image to corresponding pointers on the reference image.

When a patentee chooses to specifically describe the invention in one particular way, the specification can provide guidance as to what that claim means. *Poly-Am., L.P. v. API Indus., Inc.*, 839 F.3d 1131, 1137 (Fed. Cir. 2016) (holding that the district court’s construction of the claim

term “short seal” to require inward extension did not improperly import a limitation from the specification where “[e]very embodiment described in the specification has inwardly extended short seals”). Here, **every embodiment for** “performing registration of the digital image with the reference image,” as claimed, **requires matching pointers on a captured image to corresponding pointers on the reference image.** ’109 Patent at 17:29-46, 20:63-65, 21:8-10, 21:19-22, 21:61-22:1, 23:24-44, Figs. 10A-10B, 12, 16. “[T]he specification’s emphasis of a particular feature’s importance to the invention can indicate what the patentee had claimed and disclaimed.” *Ultravision Techs., LLC v. Govision, LLC*, No. 22-1098, 2023 WL 2182285, at *4 (Fed. Cir. Feb. 23, 2023).

The ’109 Patent repeatedly describes **pointers** (e.g., white dots/stickers) being placed at various points on the user’s body to correlate a before image (i.e., **a reference image**) with an after image (i.e., a **captured image or digital image**) “to minimize distortion from single camera.” *Id.* at 17:58-59; Myler, ¶¶87-88.¹⁵ For example, Figs. 10A-10B depict embodiments where a user is equipped with pointers and a camera is located at the user’s eye level. *Id.* at 20:63-65, 21:8-10. The user is “positioned at a distance from the camera, such that it will eliminate most of the camera distortion when looking at the camera,” allowing for generation of a **reference image**. *Id.* at 20:66-21:1; see also *id.* at 21:1-3. “Then a **registration of the reference and actual image is performed, by matching the pointers on the actual image to those of the references image.**” *Id.* at 21:22-24;

¹⁵ The specification also passingly makes reference to “multiple registration techniques (e.g., projection, affine transformation, similarity, polynomial, or any combination, etc.)” to correct “multiple distortions (projection, barrel, fisheye, or any combination, etc.).” ’109 Patent at 17:49-54. It is known in the art that these registration techniques require matching pointers, consistent with Samsung’s construction. See Ex. 6 (MATHWORKS, *Geometric Transformation Types for Control Point Registration*, <https://www.mathworks.com/help/images/geometric-transformation-types-for-control-point-registration.html>) (describing a minimum number of “Control Point Pairs” for the above-listed registration techniques).

Figs. 10A-10B; Myler, ¶¶88-90. The specification describes that “[o]nce the target and reference images are obtained, the **distorted target images** that were taken from the tilted camera are **registered to the reference image(s) using the pointers.**” *Id.* at 21:61-63; 23:35-37; 23:41-44.

Plaintiff takes issue with Defendants’ construction and the clear disclosure of the Asserted Patents by pointing to U.S. Patent Publication 2014/0225978 A1 as “disclos[ing] alternative techniques to pointers for image registration.” Br. at 21. However, US 2014/0225978 is one of the “References Cited” on the face of the ’109 Patent. Its subject matter is not incorporated into the ’109 Patent and does not change the disclosure of what patentee described as its invention within the intrinsic evidence. Regardless, US 2014/0225978 does not relate to a registration technique that even uses **a reference image**, as required in claim 7. The Kalman filter, IR camera, and isolation techniques described do not use a reference image and are inapplicable to the claimed digital image registration.

Further, this case is distinguishable from *Hill-Rom Servs. v. Stryker Corp.*, 755 F.3d 1367, 1371 (Fed. Cir. 2014)). In *Hill-Rom*, the Court did not find disclaimer or lexicography where the specification had “nothing expressing the advantages, importance, or essentiality of using a wired as opposed to wireless datalink” *Hill-Rom*, 755 F.3d at 1372. In contrast, the ’109 Patent repeatedly emphasizes the advantages of using pointer-based registration to yield an optimal transformation. *Id.* at 17:39-41; 21:22-26. *SRI Int’l v. Matsushita Elec. Corp. of Am.*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) is also inapposite here, as Samsung is not trying to read limitations from more narrow dependent claims into an independent claim (775 F.2d at 1122). Based on the ’109 Patent’s consistent and repeated intrinsic evidence, claim 7 requires “matching pointers on a captured image to corresponding pointers on the reference image.” Myler, ¶¶86-91.

H. “adaptive transformation mapping” (’110 Patent – Claim 1)

<i>EyesMatch’s Proposed Construction</i>	<i>Samsung’s Proposed Construction</i>
A selected set of image transformations based on what is detected in the stream of images.	A transformation mapping whose parameters are continuously variable.

Outside claim 1 and the Abstract, “adaptive” does not appear anywhere in the ’110 Patent.

It does, however, appear several times in the ’109 Patent (incorporated by reference into the ’110 Patent), where patentee unequivocally states that “adaptive” means “continuously variable.” ’109 Patent at 14:35-39 (“adaptive, i.e., continuously variable”). “[I]f the patentee acted as his own lexicographer and clearly set forth a definition of the disputed claim term in [] the specification . . . ’ then that definition governs.” *Advanced Fiber Techs. Tr. v. J & L Fiber Servs., Inc.*, 674 F.3d 1365, 1374 (Fed. Cir. 2012). Patentee’s definition is further clarified by use of “adaptive” throughout the ’109 Patent’s specification, which states that the system must be adaptive and continuously vary in real time to accommodate for user movement in front of the camera and any resulting image distortions. ’109 Patent at 15:9-12; 16:25-29; *see also* Myler ¶¶95.

EyesMatch’s arguments against this explicit construction are that (1) the claim’s plain meaning teaches that “adaptive” means adapting to what is detected in the captured image and (2) Defendants’ proposed construction would allegedly “improperly exclude disclosed embodiments.” Br. at 22. With respect to the plain meaning of claim 1, nothing in the claim suggests that “adaptive” means adapting to “what is detected in the captured images,” as EyesMatch suggests. Myler, ¶¶92-96. Claim 1 indicates that “the different point of view corresponds to an image taken from a different angle,” but there is no indication as to what is meant by “adaptive transformation mapping,” nor is there any connection between this term and “position in the image, and/or their estimated distance to the camera.” Br. at 22. “When the claim language itself lacks sufficient clarity to ascertain the scope of the claims,” we look to the written description for guidance.

Deering Precision Instruments, LLC v. Vector Distrib. Sys., Inc., 347 F.3d 1314, 1324 (Fed.Cir.2003). Here the written description is clear. “Adaptive” means “continuously variable.”

With respect to EyesMatch’s second argument, EyesMatch’s reliance on *In re Katz* is misplaced. Brief at 22. It is well settled that a claim need not read on all embodiments described in a patent. *SIMO Holdings Inc.*, 983 F.3d at 1379-80. Nevertheless, EyesMatch reads “real time” into Defendants’ construction which requires “continuously variable” or continuously changing. Further, the specification describes “continuously tracking the distance to the user.” ’109 at 16:29-31. Thus, even parameters varying in “semi-real time” as EyesMatch suggests, are based on continuously tracking the position of the user and the distance to the user. These parameters are continuously changing (i.e., variable).

I. “mirror tracking mode” (’110 Patent – Claim 1)

<i>EyesMatch’s Proposed Construction</i>	<i>Samsung’s Proposed Construction</i> ¹⁶
A mode of tracking a user to mimic a mirror reflection of the user.	A mode of operation in which the user sees their reversed reflection appearing at approximately double the distance from the camera and the reflection maintains approximately the same size regardless of the user movement.

A POSA would understand “mirror tracking mode” to mean a mode of operation where the display “mimics the reflection of a mirror” as construed for the ’109 Patent. Thus, this term should be construed as “a mode of operation in which the user sees their reversed reflection appearing at approximately double the distance from the camera and the reflection maintains approximately the same size regardless of the user movement.”

The ’110 Patent does not explicitly recite a “mirror tracking mode.” Rather, the Asserted Patents describe a “**mirror mode**,” wherein “the controller perform [sic] transformation operation

¹⁶ The word “approximately” is added for consistency with the updated construction for the “it appears to mimic a reflection of a mirror” term. See *supra* IV.C.

on the image of the user, such that the image presented on the monitor *mimics the user’s reflection in a mirror.*’ 110 Patent at 29:21-24; ’109 Patent at 28:32-35 (“*during mirror mode*, since the monitor shows a transformed image of what the camera sees now, the user observing the monitor has the *perception that he is looking at a mirror*”). The ’110 Patent also describes a “*mirror-mimicking mode* for displaying the *mirror-mimicking image on the monitor.*” *Id.* at 31:13-16.

Based on the intrinsic evidence and for at least the basis underlying the “it appears to mimic a reflection of a mirror” construction (*supra*, §VI.C), a POSA would understand “mirror tracking mode” to include similar requirement to mimic the reflection of a mirror in this mode.

J. “utilizes the angle of the images captured by the camera” (’110 Patent – Claim 1)

<i>EyesMatch’s Proposed Construction</i>	<i>Samsung’s Proposed Construction</i>
Utilizes the angle of the user’s image captured by the camera	Indefinite.

The term “utilizes *the angle of the images captured by the camera*” is ambiguous and lacks a reasonably ascertainable meaning to a POSA. *Nautilus*, 572 U.S. at 901; *Trs. of Columbia Univ.*, 811 F.3d at 1367; Myler, ¶101. This term first appears in the last limitation of claim 1 of the ’110 Patent without any prior recitation of “*an angle of images captured by the camera.*” The term “angle” appears in a preceding limitation of claim 1; however, this “angle” is a “different angle” and not “the angle of the images captured by the camera” in this limitation. Further, as Dr. Myler testified, on its face the claim is nonsensical to a POSA because an image does not have an angle nor could a camera capture an image of the angle of the images as the claim requires. Myler, ¶¶101-102.

With no clear antecedent basis, a POSA is left to guess as to what “the angle of the images captured by the camera” means. EyesMatch does not attempt to reconcile the antecedent basis issue of the claim, and instead proposes that this term means “utilizes the angle of the user’s image

captured by the camera.” Br. at 26. However, EyesMatch’s proposed construction does not address the flaws in the original claim. EyesMatch’s construction still uses the term “the angle” without antecedent basis, and only exacerbates the problem as to what is “the user’s image” which lacks antecedent basis and does not provide clarity as to how a “user’s image” could have an angle.

EyesMatch contends “a POSITA would understand both the camera POV and the FOV in which the user appears to be the claimed ‘angle of the image.’” Br. at 29. This is nonsensical. By EyesMatch’s own admission, and as understood in the art, the Point of View (“POV”) and Field of View (“FOV”) are two entirely distinct concepts. Myler, ¶¶103-104. A POSA would not understand this term (“*the* angle of this images”) to include two separate and distinct concepts. EyesMatch admits as much noting that 1) the POV is an *angle of the camera* (“toward the captured screen,” Br. at 27) and 2) the FOV is the *angle of the field* captured by the camera (Br. at 28). As these are two different concepts and different angles, it is not clear which angle, if either, corresponds to “the angle of *images captured* by the *camera*” as claimed.

Further, it is undisputed that the POV is an angle of the *camera*, not of the angle “of *images captured* by the *camera*” as the claim requires. EyesMatch’s reference to the disclosed triangulation technique (Br. at 28) does not support its argument, as this technique still describes the “tilt of the camera” (i.e., angle *of the camera*) (’109 Patent at 24:64) and does nothing to clarify what is meant by the claim term “utilizes the angle of the *images captured by the camera*.” Further, in looking at the claim language, when patentee wanted to refer to a camera POV, the patentee explicitly referred to the “the camera’s actual point of view.” Myler, ¶105. And when the patentee wanted to claim a change in the camera’s POV to a different POV, the patentee explicitly claimed just that. Claim 1 recites “a different point of view corresponds to an image taken from *a different angle*.” EyesMatch’s proposal that this term means the camera POV asks

the Court to read back into the claim again the camera POV with a different term than what the patentee already defined in the claim. Further, EyesMatch references the specification's discussion of "manipulating the FOV" as allegedly teaching the claimed "utilizing the angle of the image." Br. at 29. However, this disclosure ('109 Patent at Fig. 6, 14:51-55) is labeled as a "not practical solution" (*id.* at 14:20-22) and therefore does not provide clarity. Moreover, as previously explained, this embodiment is disclaimed. *Supra* §IV.B.

Lastly, EyesMatch argues that the claim is not indefinite simply because it "covers a broad range of angles." Br. at 29. As discussed, this is not simply a question of breadth, and Plaintiff's proposed construction does not resolve the issues. Claim 1 recites, "the camera's actual point of view," "different point of view," and "a different angle," however, it is unclear what relationship, if any, those terms have to "the angle of images captured by the camera," or if "the angle" refers to something not already defined in the claim and a different angle entirely. Myler, ¶103. "The parties and the Court would merely be guessing as to what is meant by the undefined term," and thus, this term is indefinite. *Zilkr Cloud Tech., LLC v. Cisco Sys., Inc.*, 2:22-CV-00166, Claim Constr. Ord. (E.D. TX, Payne, J.) at 39-40; *CardWare Inc. v. Samsung Electronics*, 2:22-cv-141, Claim Constr. Ord. (E.D. TX, Payne, J.) at 19-20, 37-40.

V. CONCLUSION

Samsung respectfully requests that the Court adopt its proposed constructions.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that the foregoing document was served by email on all counsel of record by the CM/ECF system on November 8, 2024.

/s/ Jose Villarreal