

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

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ARTEC EUROPE S.À.R.L.,

Plaintiff,

-against-

MEMORANDUM AND ORDER
22-CV-01676 (OEM) (CHK)

SHENZHEN CREALITY 3D TECHNOLOGY CO.,
LTD., and SHENZHEN JIMUYIDA TECHNOLOGY
CO., LTD.,

Defendants.
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ORELIA E. MERCHANT, United States District Judge:

On March 25, 2022, Plaintiff Artec Europe S.À.R.L. (“Artec” or “Plaintiff”) commenced this patent infringement action against Defendants Shenzhen Creality 3D Technology Co., Ltd., (“Creality”) and Shenzhen Jimuyida Technology Co. Ltd. (“Jimuyida”) (“Defendants”). Plaintiff alleges, *inter alia*, that Defendants infringed on its patented three-dimensional (“3D”) scanning technology. *See* Amended Complaint, Dkt. 79 (“Am. Compl.”); Second Amended Complaint, Dkt. 106 (“SAC”).

Before the Court is Defendants’ fully briefed motion for summary judgment¹ and Plaintiff’s fully briefed motion to preclude certain testimony of Defendants’ technical expert, Dr. Steven Gortler (“Dr. Gortler”).² For the following reasons, Defendants’ motion for summary

¹ *See* Memorandum of Law in Support of Defendants’ Motion for Summary Judgment, Dkt. 161-1 (“Motion” or “Mot.”); Defendants’ Statement of Material Facts Under Local Civil Rule 56.1, Dkt. 155-2 (“56.1 Statement”); Plaintiff’s Opposition to Defendants’ Motion for Summary Judgment, Dkt. 168-1 (“Opp’n”); Plaintiff Artec Europe S.À.R.L.’s Response to Defendants’ Statement of Material Facts Under Local Civil Rule 56.1, Dkt. 168-2 (“56.1 Resp.”); Reply in Support of Defendants’ Motion for Summary Judgment, Dkt. 156 (“Reply”).

² *See* Plaintiff Artec Europe S.À.R.L.’s Memorandum in Support of its Motion to Preclude the Testimony of Defendants’ Technical Expert Steven J. Gortler, Dkt. 179 (“Motion to Preclude” or “Mot. to Preclude”); Defendants’ Opposition to Plaintiff’s Motion to Preclude the Testimony of Defendants’ Technical Expert Steven J. Gortler, Dkt. 160 (“Mot. to Preclude Opp’n”); Artec Europe S.À.R.L.’s Reply in Support of Motion to Preclude Testimony Defendants’ Expert Steven J. Gortler, Dkt. 164.

judgment is granted in part and denied in part, and Plaintiff's motion to preclude the testimony of Dr. Gortler is granted in part and denied in part.

BACKGROUND³

Artec, a Luxembourg-based company, develops, manufactures, and markets 3D scanners and 3D scanning software. SAC ¶ 17. Its products include the Artec Leo 3D Scanner, the Artec Eva Scanner, and Artec Studio 3D software suite. *Id.* Artec's software is used in conjunction with their scanners to render raw data, allowing users "to explore and manipulate the 3D image and communicate it in a readable form to 3D printers and other devices." *Id.* ¶ 22.

Artec owns U.S. Patent 7,768,656, which issued on August 3, 2010, *see* SAC, Exhibit A, Dkt. 106-1 ("656 Patent"); U.S. Patent 8,488,129, which issued on July 16, 2013, *see* SAC, Exhibit B, Dkt. 106-2 ("129 Patent"); and U.S. Patent 10,962,357, which issued on March 30, 2021, *see* SAC, Exhibit C, Dkt. 106-3 ("357 Patent") (collectively, "Asserted Patents"). The '656 and '129 Patents "relate to systems and methods for scanning, measurement, and capture of objects," while the '357 Patent relates to data-collection feedback. SAC ¶ 2.

Defendant Creality is a 3D scanning and printing company based in Shenzhen, China. *Id.* ¶ 3. Creality manufactures the CR-Scan 01 Portable 3D Scanner, the CR-Scan Lizard 3D Scanner, and the accompanying CR Studio software suite (collectively, "Creality Accused Products"). *Id.* Creality markets and sells these products throughout the United States. *Id.*

Defendant Jimuyida is also based in Shenzhen, China, and assists Creality in the manufacturing of its scanning devices and the development of its software. *Id.* ¶ 4. Jimuyida markets and sells Creality's products under its 3DMakerPro brand while also marketing and selling

³ The parties' statements of material fact under Local Civil Rule 56.1 only address facts related to the infringement and validity of the patents at issue. *See generally* 56.1 Statement; 56.1 Resp. As such, the background facts included in this section are drawn from the allegations in Plaintiff's second amended complaint. *See generally* SAC.

its own products including the Magic Swift Plus 3D Scanner, the Whale 3D Scanner, and the accompanying JM Studio software suite (collectively, “Jimuyida Accused Products”).⁴ *Id.* Jimuyida markets and sells these products throughout the United States. *Id.*

PROCEDURAL HISTORY

Artec commenced this action by filing its complaint on March 25, 2022. *See* Complaint, Dkt. 1. Creality answered the complaint on January 9, 2023. Shenzhen Creality 3D Technology Co., Ltd.’s Answer to Complaint, Affirmative Defenses, Dkt. 68.

Artec filed an amended complaint on January 30, 2023, *see* Am. Compl, asserting patent infringement claims against Jimuyida in addition to Creality. *See id.* Creality answered the amended complaint on March 1, 2023. Shenzhen Creality 3D Technology Co., Ltd.’s Answer to Artec Europe S.À.R.L.’s Amended Complaint, Affirmative Defenses, Dkt. 89. Jimuyida answered the amended complaint on June 8, 2023. Shenzhen Jimuyida Technology Co., Ltd.’s Answer to Complaint, Affirmative Defenses, Dkt. 98.

On July 12, 2023, the case was reassigned to the undersigned.

On July 20, 2023, Artec sought leave to file a second amended complaint, which the Court granted. Letter from Plaintiff to the Court (July 20, 2023), Dkt. 104; Order, dated Aug. 17, 2023. Artec filed its second amended complaint, which is the operative complaint, on August 24, 2023, *see* SAC, which Defendants answered on September 7, 2023. Shenzhen Jimuyida Technology Co. Ltd.’s Answer to Artec Europe S.À.R.L.’s Second Amended Complaint, Affirmative Defenses, Dkt. 109; Shenzhen Creality Technology Co. Ltd.’s Answer to Artec Europe S.À.R.L.’s Second Amended Complaint, Affirmative Defenses, Dkt. 110.

⁴ Collectively, the Creality Accused Products and the Jimuyida Accused Products are referred to as the “Accused Products.”

The Court held a claim construction hearing pursuant to *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996), on June 3, 2024, and July 17, 2024. Minute Entry, dated June 3, 2024; Minute Entry, dated July 17, 2024. The Court issued an order construing the claim terms of the Asserted Patents on October 11, 2024. Order, dated Oct. 11, 2024, Dkt. 129 (“*Markman Order*”).

The parties completed discovery on June 9, 2025. Order, dated June 9, 2025.

On July 9, 2025, Defendants requested a pre-motion conference in anticipation of a motion for summary judgment. Letter from Defendants to the Court (July 9, 2025), Dkt. 144. The Court denied the pre-motion conference request and, instead, set a briefing schedule for the motion for summary judgment. Order, dated July 14, 2025. A few days later, the Court set a briefing schedule for the motion to preclude expert testimony, Order, dated July 17, 2025. The parties filed the fully briefed summary judgment Motion and fully briefed Motion to Preclude on September 26, 2025. *See supra* notes 1, 2.

On October 3, 2025, Artec requested oral argument on the summary judgment motion. Letter from Plaintiff to the Court (Oct. 3, 2025), Dkt. 170. The Court granted the request and held oral argument on October 29, 2025.

LEGAL STANDARD

The summary judgment standard in a patent case is the same as in any other case. *See Mich & Mich TGR, Inc. v. Brazabra, Corp.*, 128 F. Supp. 3d 621, 629 (E.D.N.Y. 2015), *aff’d sub nom.*, *Mich & Mich TGR, Inc. v. Brazabra Corp.*, 657 F. App’x 971 (Fed. Cir. 2016); *Desper Prods., Inc. v. QSound Labs, Inc.*, 157 F.3d 1325, 1332 (Fed. Cir. 1998). A movant is entitled to summary judgment where the evidence, viewed in the light most favorable to the non-movant, shows that “there is no genuine issue of material fact and the moving party is entitled to a judgment as a matter

of law.” FED. R. CIV. P. 56(a); *Vacold LLC v. Cerami*, 545 F.3d 114, 121 (2d Cir. 2008) (citing *Allianz Ins. Co. v. Lerner*, 416 F.3d 109, 113 (2d Cir. 2005)).

A court may grant summary judgment only “if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law.” *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986) (quoting FED. R. CIV. P. 56(c)). “Only disputes over facts that might affect the outcome of the suit under the governing law will properly preclude the entry of summary judgment.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). The moving party bears the burden of “informing the district court of the basis for its motion” and identifying the matters that “it believes demonstrate the absence of a genuine issue of material fact.” *Celotex*, 477 U.S. at 323. In order to withstand a motion for summary judgment, the nonmoving party must then put forth evidence setting forth specific facts that show there is a genuine issue of material fact. *Anderson*, 477 U.S. at 248. The court must view the evidence in a light most favorable to the nonmoving party. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986).

“Courts should approach motions for summary judgment for patent invalidity and infringement with great care because of the numerous fact issues involved.” *Plew v. Ltd. Brands, Inc.*, 729 F. Supp. 2d 629, 633 (S.D.N.Y. 2010); *see also Andersen Corp. v. Pella Corp.*, 300 F. App’x 893, 899 (Fed. Cir. 2008) (noting that the U.S. Patent and Trademark Office’s issuance of a patent is entitled to deference when a court addresses patent invalidity on summary judgement); *Amhil Enters. Ltd. v. Wawa, Inc.*, 81 F.3d 1554, 1557-58 (Fed. Cir. 1996) (noting that summary judgment on patent infringement may properly be granted when “when no genuine issue of

material fact exists and no expert testimony is required to explain the nature of the patented invention or the accused product or to assist in their comparison.”).

DISCUSSION

I. Defendants’ Motion for Summary Judgment

Defendants move for summary judgment on the grounds of non-infringement and patent invalidity.⁵ *See generally* Mot.

A. Patent Infringement

U.S. Code, title 35, section 271(a), provides that “whoever without authority makes, uses or sells any patented invention . . . infringes the patent.” Parties who actively induce the infringement of a patent may also be liable for patent infringement, 35 U.S.C. § 271(b), and parties who knowingly contribute to infringement may be liable as well, 35 U.S.C. § 271(c).

“An infringement analysis entails two steps. The first step is determining the meaning and scope of the patent claims asserted to be infringed. The second step is comparing the properly construed claims to the device accused of infringing.” *Duncan Parking Techs., Inc. v. IPS Grp., Inc.*, 914 F.3d 1347, 1360 (Fed. Cir. 2019) (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995), *aff’d*, 517 U.S. 370 (1996)). Once the claims are construed, “[a] patentee ordinarily bears the burden of proving infringement.” *Medtronic, Inc. v. Mirowski Fam. Ventures, LLC*, 571 U.S. 191, 193 (2014).

Literal infringement requires that every claim limitation is found in the accused product. *V-Formation, Inc. v. Benetton Grp. SpA*, 401 F.3d 1307, 1312 (Fed. Cir. 2005). If even one claim limitation is not met, there is no literal infringement. *MicroStrategy Inc. v. Bus. Objects, S.A.*, 429 F.3d 1344, 1352 (Fed. Cir. 2005). If literal infringement cannot be proven, a patent may still be

⁵ Defendants do not challenge the validity of the ’357 Patent. *See generally* Mot.

infringed under the doctrine of equivalents.⁶ *See Eastcott v. Hasselblad USA, Inc.*, 564 F. App'x 590, 594 (Fed. Cir. 2014) (“[A] product or process that does not literally infringe upon the express terms of a patent claim may nonetheless be found to infringe if there is ‘equivalence’ between the elements of the accused product or process and the claimed elements of the patented invention.” (quoting *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 21 (1997))).

1. The '656 Patent

a. The Means and Scope of the '656 Patent Claim Invention

The '656 Patent claims a system and method for the 3D measurement of material objects using structured light triangulation. *See generally* '656 Patent. The claimed system includes multiple physical components such as a light projector, a light source, a slide with a slide pattern, a projector lens, a device for capturing an image of structured light, and a computing device. *Id.* at 8:16-54. Figure 1 of the '656 Patent, included below, shows the physical components working together to accomplish the claimed invention. *Id.* at Fig. 1.

⁶ The Court notes that while Plaintiff alleges infringement for each Asserted Patent literally or under the doctrine of equivalents, SAC ¶¶ 87, 100, 113, neither party addresses the doctrine of equivalents in their summary judgment papers, *see generally* Mot.; Opp'n; Reply.

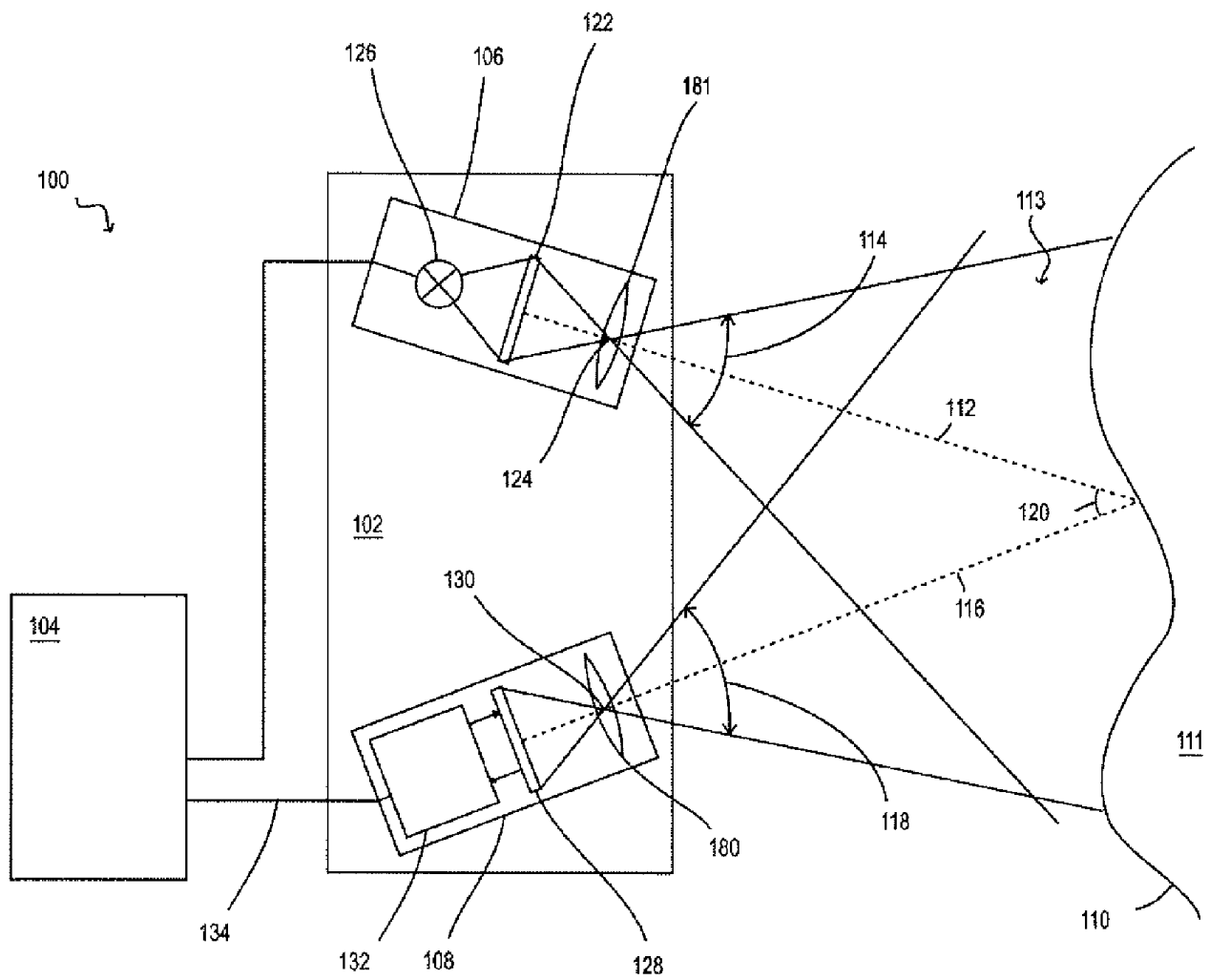
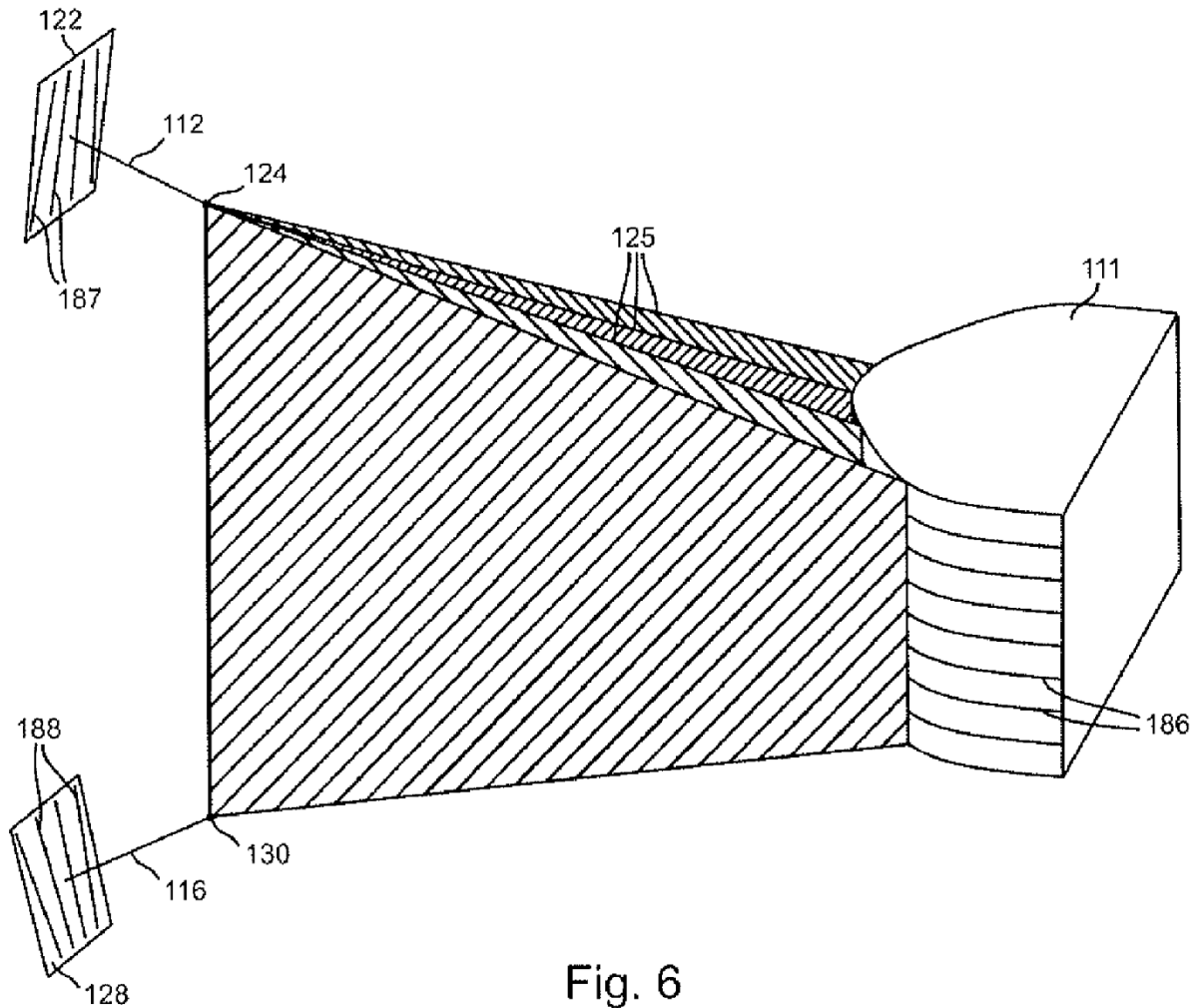


Fig. 1

The '656 Patents embodies what is known as “epipolar geometry,” illustrated below in Figure 6:



The geometry of Figure 6 is defined by the “vertices” 124 and 130 of the projector and camera, respectively. *Id.* at 5:42-64. As illustrated in the drawing, an infinity of planes 125, called “epipolar planes,” pass through the line connecting the projector vertex 124 and the camera vertex 130. *Id.* The intersections of the epipolar planes with slide 122 and camera receiver 128 form “projector meridians” 187 and “camera meridians” 128. *Id.*

Figure 5 of '656 Patent depicts an illustration of the pattern on the projector slide (left) and the image of the same pattern projected on the object being scanned, as captured by the camera (right):

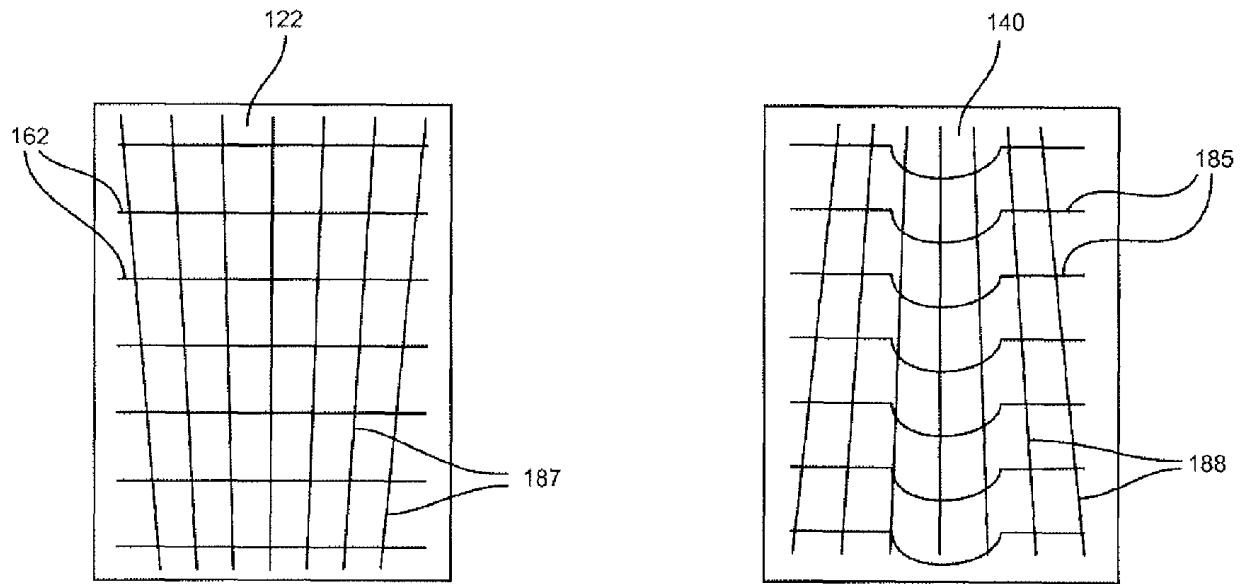


Fig. 5

The claimed invention of the '656 Patent involves the use of a structured light pattern in which “coded elements” lie along epipolar planes: “[T]he structured light 113 can be formed as a pattern including a plurality of different groups of coded elements, wherein all of the coded elements in each group of coded elements lie within the same respective plane 125 passing through vertices 124, 130 of the projector 106 and the camera 108. *Id.* at 6:39-44.

The claim limitations relevant to the present Motion are outlined in representative claim 1:⁷

⁷ In their Motion, Defendants focus on claim 1 of the '656 Patent and submit that it is representative. Mot. at 6 n.1. As Plaintiff does not dispute this contention in its Opposition, *see generally* Opp’n, the Court treats claim 1 as representative. *See Berkheimer v. HP Inc.*, 881 F.3d 1360, 1365 (Fed. Cir. 2018) (“Courts may treat a claim as

1. A system for the 3D measurement of the shape of a material object, comprising:

a light projector for projecting a structured light pattern onto a surface of said object, wherein said light projector comprises a light source, a slide with a slide pattern located on a slide surface, and a projector lens characterized by a projector lens vertex;

a device for capturing an image of said structured light pattern reflected on said object, wherein said device for capturing an image comprises a device lens characterized by a device lens vertex; and

a computing device for determining a measurement relating to the shape of said object using a triangulation algorithm based on a correspondence between points in said slide pattern and said image, and

wherein said slide pattern comprises a plurality of coded elements, where each of said coded elements is characterized by at least one parameter and, where said at least one parameter defines a spatial or temporal distribution of an amplitude or a wavelength of said structured light, and

wherein said coded elements are assigned to one of at least first group or second group, each of which first group and second group comprising at least two of said coded elements, and

wherein ***at least a first slide virtual line and a second slide virtual line are defined on said slide surface***, where said first slide virtual line is defined by an intersection between said slide surface and a first plane passing through said projector lens vertex and through said device lens vertex, and said second slide virtual line is defined by an intersection between said slide surface and a second plane passing through said projector lens vertex and through said device lens vertex, and

wherein ***said coded elements of said first group are located along said first virtual line and said coded elements of said second group are located along said second virtual line***.

Id. at 8:16-54 (emphasis added).

The parties agree that the recited first and second virtual lines correspond to the “projector meridians” of the specification, which are also known as “epipolar lines” in the technical literature.

56.1 Resp. ¶ 28. The parties also agree that “[a]ll asserted claims of the ’656 Patent include a

representative . . . if the patentee does not present any meaningful argument for the distinctive significance of any claim limitations not found in the representative claim.”).

requirement that a ‘first slide virtual line’ and a ‘second slide virtual line’ are each ‘defined on said slide surface.’” *Id.* ¶ 1.

b. Comparison of the ‘656 Construed Claims to the Accused Products

Defendants make two primary assertions in support of their Motion relating to the non-infringement ‘656 Patent. First, Defendants argue that no reasonable jury can find that the Accused Products include virtual lines defined on a slide surface. Mot. at 7-8; *see* ‘656 Patent at 8:41-42. Second, Defendants argue that no reasonable jury can find that the Accused Products include coded elements located along the virtual lines. Mot. at 8-11; *see* ‘656 Patent at 8:50-54.

Defendants’ first contention rests on the Court’s construction of the term “defined on the surface of the slide” to mean physically fixed or demarcated on the outer surface of the slide. Mot. at 7; *Markman* Order at 12-13, 30-31. Defendants argue that because there is no dispute that the Accused Products do not include physically defined, fixed, or demarcated lines on the outer surface of the slide corresponding to the claimed “virtual lines,” summary judgment is appropriate. Mot. at 7; 56.1 Resp. ¶ 5.

Defendants’ position, while consistent with dicta in the Court’s *Markman* Order,⁸ contradicts the plain language of the claims, the specification, and the report of Plaintiff’s expert, Dr. Iman Sadeghi (“Dr. Sadeghi”), thereby reflecting genuine issues of material fact.

⁸ In the *Markman* Order, the Court agreed with Defendants’ proposed claim constructions regarding the location of the “slide pattern.” With respect to the limitation “a slide pattern located on a slide surface,” ‘656 Patent at 8:19-20, the Court stated that it “deems that the information comprising the ‘slide pattern’ must [be] physically located or contained [on] the ‘slide surface,’ whatever medium the ‘slide’ may be.” *Markman* Order at 14. The Court further agreed with Defendants’ construction of the limitation “defined on said slide surface,” stating that it “construes the term to mean ‘[t]he slide patten exists on the surface of the slide.’” *Id.* at 31.

However, in its analysis, the Court incorrectly equated the “slide pattern” and “virtual lines.” *See id.* at 13 (“Figure 1 demonstrate[s] that, whatever medium may be used for a ‘slide,’ the information comprising the ‘slide pattern’ – i.e., the ‘virtual lines’ – must exist or be contained *on* the ‘surface’ of the slide and not be transmitted from another location.”); *id.* at 31 (“As the Court explains above, the specification teaches that the virtual lines comprising the ‘slide pattern’ must be contained on the surface of the slide medium and not projected onto the slide from another third source.”). Figure 1 of the ‘656 Patent does not provide any markings or illustrations that demonstrate the claimed virtual lines. *See* ‘656 Patent at Fig. 1. Additionally, in claim construction briefing, neither party asserted that the

It is undisputed that the '656 Patent discloses a system and a method that uses “epipolar geometry.” Mot. at 4; Opp’n at 13. Epipolar geometry is an algorithm for making 3D measurements, employing virtual “epipolar lines” and “epipolar planes.” Opp’n at 13; Declaration of Richard de Bodo in Support of Plaintiff’s Opposition to Summary Judgment, Exhibit D ¶¶ 84-88, Dkt. 168-3 (“Sadeghi Report”). It is also undisputed that the “meridians” 187 and 188, as shown in Figure 5, function as epipolar lines and correspond to the “virtual lines” called for in the claims. '656 Patent at 5:20-6:26; Mot. at 5; Opp’n at 13. The '656 Patent further discloses that the “slide pattern” comprises “coded elements”—there is no indication that the “slide pattern” consists of “virtual lines,” “epipolar lines,” or the “meridians.” '656 Patent at 6:35-7:17. Rather, the '656 Patent states that the “virtual line” is defined by an “an intersection between said slide surface and a first plane passing through said projector lens vertex and through said device lens vertex.” *Id.* at 8:42-49. As such, Plaintiff argues that “the ‘virtual lines’ are not physically located on the surface of the slide but are defined by operation of an epipolar algorithm in code.” Opp’n at 14. This analysis contradicts Defendants’ non-infringement contention—that the '656 Patent requires physically defined, fixed, or demarcated lines on the outer surface of the slide corresponding to the claimed “virtual lines,” and the Accused Products do not include such a feature. *See* Mot. at 7. As Defendants admit that “[t]he alleged ‘virtual lines’ in [the Accused Products] are allegedly defined mathematically in software, not physically defined on the slide itself,” 56.1 Resp. ¶ 5, and Plaintiff similarly contends that the '656 Patent’s “virtual lines are

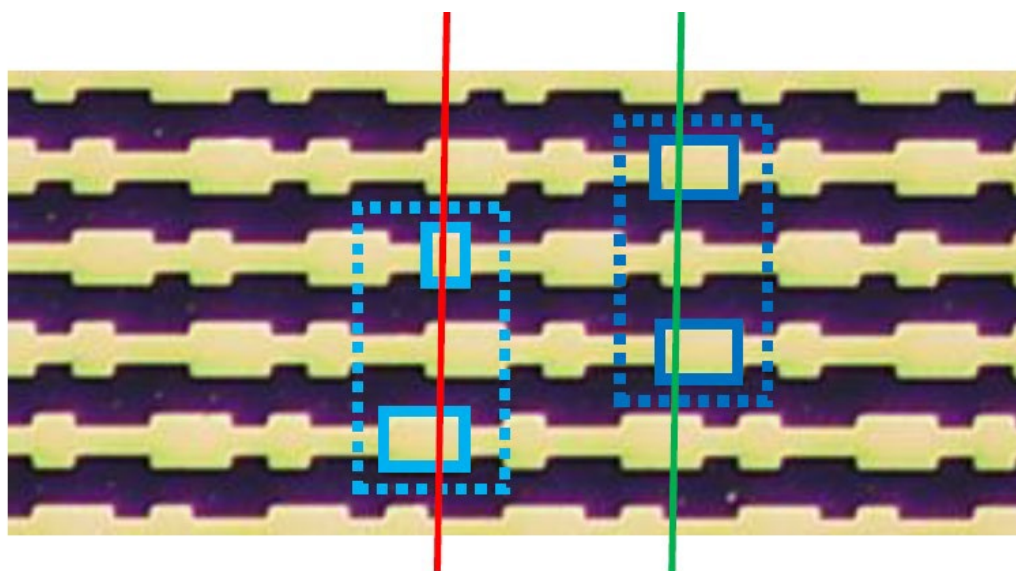
slide pattern comprises virtual lines, *see* Plaintiff’s Opening Claim Construction Brief at 6-8, Dkt. 117; Defendant’s Responsive Claim Construction Brief at 12-15, Dkt. 120. Moreover, nowhere do the claims recite that the slide pattern comprises virtual lines, epipolar lines, or projector meridians. *See generally* '656 Patent.

Nevertheless, “[d]istrict courts may engage in a rolling claim construction, in which the court revisits and alters its interpretation of the claim terms as its understanding of the technology evolves.” *Jack Guttman, Inc. v. Kopykake Enters., Inc.*, 302 F.3d 1352, 1361 (Fed. Cir. 2002). While the core of the Court’s claim construction regarding the location of the slide pattern is unchanged, the Court does not construe the claims to mean that the “slide pattern” comprises “virtual lines.”

defined algorithmically across the slide patterns . . . [and] have no physical presence on the slide surface,” Opp’n at 18, there is a genuine dispute of material fact as to infringement on these grounds.

Defendant’s second contention, that no reasonable jury could find that the Accused Products include coded elements located along the virtual lines, similarly fails. It is undisputed that “[a]ll asserted claims of the ’656 Patent include a requirement that ‘coded elements are assigned to one of at least first group or second group.’” 56.1 Resp. ¶ 2. It is also undisputed that “[a]ll asserted claims of the ’656 Patent include a requirement that ‘coded elements of said first group are located along said first virtual line,’ and that ‘coded elements of said second group are located along said second virtual line.’” *Id.* ¶ 3. Defendants contend that “[n]o such linear arrangement of ‘coded elements’ is found on the slides of [the Accused Products]. Mot. at 9.

In making this argument, Defendants challenge Plaintiff’s reliance on the opinion of Dr. Sadeghi, who, according to Defendants, “drew imaginary boxes around arbitrarily-chosen ‘coded elements’ and declared them to be ‘groups’ aligned with his imaginary ‘virtual lines.’” Mot. at 9. Dr. Sadeghi’s example of the purported alignment is included below:



First Group & Virtual Line 1 – Second Group & Virtual Line 2

Mot. at 9 (derived from Sadeghi Report ¶¶ 159-160, 203).

In response, Defendants rely on the opinion of their expert, Dr. Gortler, who explains that “there is no visible alignment between the ‘coded elements’ (outlined by thicker rectangles) that one could interpret as alignment to epipolar lines or projector meridians, i.e., being ‘located along said second virtual line.’ Rather, the rectangles are arranged at seemingly randomized positions that do not follow any particular alignment.” Declaration of Andrea Pacelli, Exhibit 5 at ¶ 71, Dkt. 145-1 (“Gortler Non-Infringement Report”). Furthermore, Defendants contend that “Dr. Sadeghi’s opinions fail to provide evidence of infringement for the majority of Defendants’ Accused Products,” as he only addresses “products that use the one slide pattern discussed in his report.” Mot. at 10.

Defendants’ arguments on this point do not demonstrate the absence of a genuine dispute of material fact. Defendants do not address Dr. Sadeghi’s explanation of how the virtual lines and groups of coded elements work in his report and deposition. *See* Sadeghi Report ¶¶ 2, 156-203; Declaration of Richard de Bodo in Support of Plaintiff’s Opposition to Summary Judgment, Exhibit I at 246:17-247:1, 251:21-252:12, Dkt. 168-4 (“Sadeghi Deposition Excerpts”). Rather, Defendants point to Dr. Gortler’s claim that the groupings of coded elements in Dr. Sadeghi’s illustration are arranged at *seemingly* randomized positions that do not follow any particular alignment. Gortler Non-Infringement Report ¶ 71 (emphasis added); Mot. at 9-10. This “seemingly” argument does not foreclose a genuine dispute of material fact, especially in light of Dr. Gortler’s admitted unfamiliarity with the Accused Products’ operation. *See* Declaration of Richard de Bodo in Support of Plaintiff’s Opposition to Summary Judgment, Exhibit J at 256:9-12, Dkt 163-12 (“I have no idea if the accused products use the existence of epipolar geometry in

any of their implemented algorithms or in any of their coding at all.”). Moreover, Defendants’ contention that Dr. Sadeghi’s opinions fail to provide evidence of infringement for the majority of Defendants’ Accused Products is genuinely disputed. *See* Opp’n at 19 (arguing that Defendants “disregard the fact[] all of their products run on the exact same software that defines the virtual lines and groups so that . . . only one illustrative example was necessary to demonstrate how all the products works”); Sadeghi Deposition Excerpts at 246:17-247:1, 251:21-252:12 (explaining the illustration of the arranged coded elements, and stating that “[a] similar illustration can be presented for any of the ten accused products” based on the source code).

Accordingly, Defendants’ Motion as to the non-infringement of the ’656 Patent is denied.

2. The ’129 Patent

a. The Means and Scope of the ’129 Patent Claim Invention

The ’129 Patent discloses an object capturing system combined with, integrated with, and otherwise attached to or otherwise positioned alongside a display device, with a corresponding method for capturing an object near a display device. ’129 Patent at 1:44-45, 1:54-55, 2:54-55. Figure 1 of ’the 129 Patent, included below, depicts the claimed system 100, including structured-light projector 106, camera 108, computing device 104, and display device 101. *Id.* at 2:46-3:29.

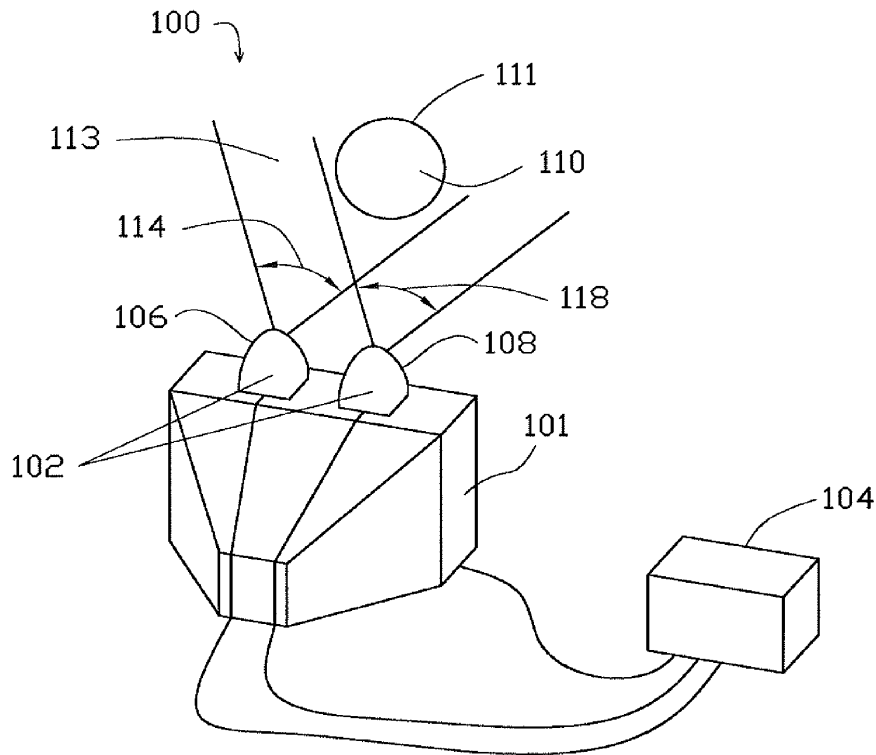


FIG. 1

The display device “may be any device that displays information to a user or toward the object 111,” including “a computer monitor, an LCD, a desktop computer, a laptop computer, a television, a portable or mobile telephone, a personal digital assistant, a handheld computing device, [or] a remote terminal.” *Id.* at 3:30-35.

The '129 Patent describes the functionality of the display device as “provid[ing] a reference position and/or a reference orientation for the position and orientation of object 111.” *Id.* at 3:50-52. For example, the object “may be positioned adjacent to a display portion or screen of the display device 101 and oriented such that the surface 110 to be analyzed by the object capturing system 102 is directed toward the display portion of the display device 101.” *Id.* 3:52-56. Applied

to facial recognition, the display device may provide “the position and/or orientation at which the user would maintain its face during operation of the display device 101.” *Id.* at 4:65-67.

The limitations relevant to the present Motion are outlined in representative claim 1:⁹

1. A system for the 3D measurement of the shape of a material object, comprising:

a display device; and

at least one projection device for projecting a structured light pattern onto the surface of an object;

at least one detection device for capturing at least one image of the surface of said object, wherein at least one of the detection devices captures at least one image of the structured light pattern acting on the surface of said object;

a computing device for determining a measurement relating to the captured image; wherein *said display device provides a position and orientation for said object to take with respect to said at least one detection device prior to capturing the at least one image.*

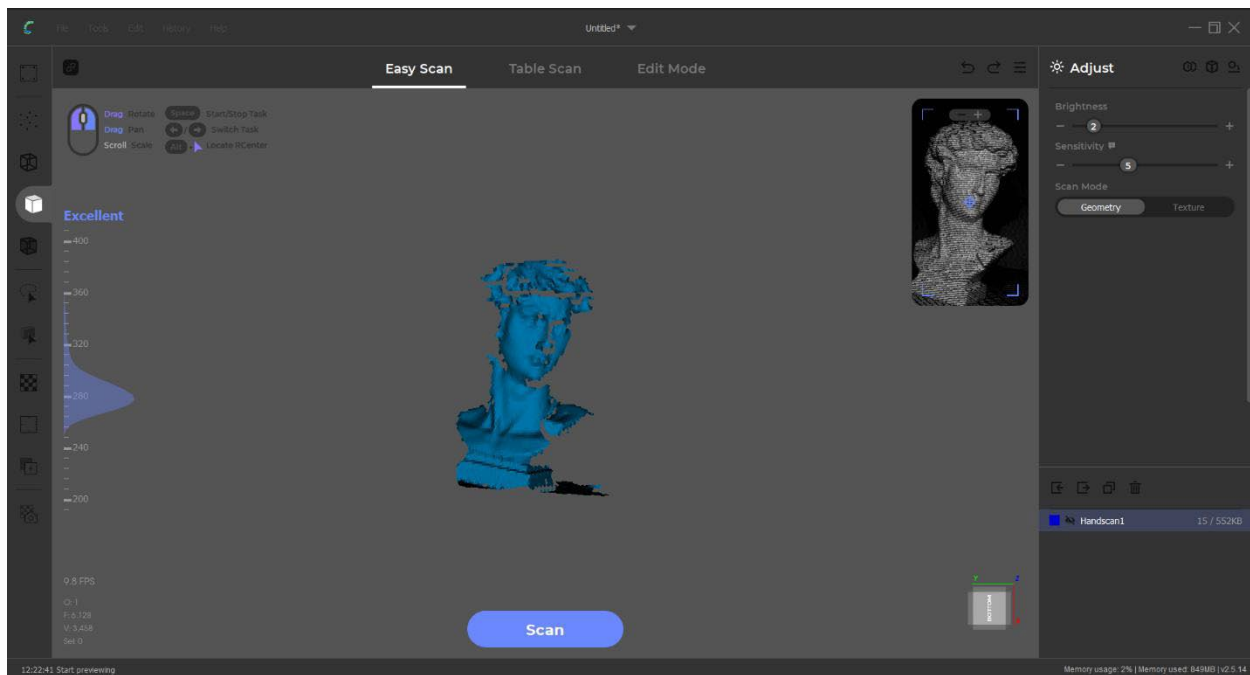
Id. at 6:61-7:9 (emphasis added).

b. Comparison of the Construed '129 Claims to the Accused Products

It is undisputed that all asserted claims of the '129 Patent require that a display device “provides a position and orientation for said object to take with respect to said at least one detection device prior to capture the at least one image.” *Id.* at 7:6-9; 56.1 Resp. ¶ 7. In its *Markman* Order, the Court construed “to take” to mean “to have,” meaning that “the display device provides the object’s starting position and orientation prior to measuring the 3D surface of an object.” *Markman* Order at 51. Defendants contend that the Accused Products do not have this functionality and therefore do not infringe the claims of the '129 Patent. Mot. at 17.

⁹ For the same reasons discussed *supra* note 7, the Court accepts claim 1 of the '129 Patent as representative.

Plaintiff's theory of infringement rests on the Accused Products' "preview mode." *See* Opp'n at 28. As explained by Plaintiff's expert, Dr. Sadeghi, the software for each of the Accused Products has a preview mode that "provides the position and orientation of the object prior to the scanning process." Sadeghi Report ¶ 262. Dr. Sadeghi describes this preview mode as the first step in the scanning process, whereby users are able to move the object around, rotate it, and decide where they want to it to be prior to scanning it. Sadeghi Deposition Excerpts at 80:7-15. In explaining how the preview mode provides a position and orientation for the object, Dr. Sadeghi references two screenshots showing a bust of David, one of which is included below:



Sadeghi Report ¶ 121. As alleged by Plaintiff, the position of the object to be scanned is provided by the ruler on the left side that shows the scanning distance, and the orientation is provided by the image itself, which shows the relative rotation of the object in relation to the camera through shadowing and two-dimensional shape. Opp'n at 30.

Defendants contend that this preview display of an object is not the same as providing a position and orientation for the object to take with respect to a display device prior to image capture. Mot. at 18-21. In so arguing, Defendants point to Dr. Sadeghi's statements when opining on the validity of the same claims. *See id.* at 19. Defendants specifically note how Dr. Sadeghi states that the display device of the '129 Patent dictates a target position and orientation, thereby directing "the object to a *specific* spatial relationship with the detection device. This allows the user to move the object until the current position aligns with the *reference* position." *Id.* (quoting Declaration of Richard de Bodo, Exhibit M ¶ 151, Dkt. 163-15 ("Sadeghi Validity Report")). Because the preview mode of the Accused Products does not actively guide the object toward a target position, but rather "simply show[s] where an object is," Defendants contend that no reasonable jury could find that the Accused Products "provide[] a position and orientation" in the manner required by the claims of the '129 Patent. Mot. at 19-22.

Defendants' arguments on this point are unavailing. In highlighting Dr. Sadeghi's out-of-context statements opining on the validity of the '129 Patent, Defendants improperly argue for a more restrictive claim construction than that ordered by the Court. There is no mention of a "reference" position and orientation as described by Defendants in the *Markman* Order, only that "the display device provides a position and orientation for the object **to have** prior to the at least one detection capturing the at least one image." *Markman* Order at 54. Even so, in opining on the functionality of the Accused Products' preview mode, Dr. Sadeghi has put forth a genuine dispute of material fact as to whether the preview mode provides what can be characterized as providing a "reference" position and orientation. *See* Sadeghi Deposition Excerpts at 80:7-15 ("You can rotate around the object so the position and orientation of the object, you can decide what you want it to be before you press the Scan button.")).

Accordingly, genuine issues of material fact remain as to whether the Accused Products infringe the '129 Patent, and Defendants' Motion as to the non-infringement of the '129 Patent is denied.

3. The '357 Patent

a. The Means and Scope of the '357 Patent Claim Invention

The '357 Patent relates to data collection and storage in 3D scanners. *See generally* '357 Patent. The specification states that a “challenge in designing 3D scanners is that 3D scanners produce an immense amount of data during scans.” *Id.* at 5:35-37. As such, the specification discusses a process for “identifying regions of an object being scanned for which sufficient data has already been collected” and “discard[ing] some or all of the data collected for those regions as the scan continues.” *Id.* at 5:38-41. Specifically, “[f]or each of a plurality of respective portions of the surface of the object,” the disclosed method “determines whether a quantity or quality of the first data meets a predefined threshold that corresponds to a quantity or quality of data needed to reconstruct the shape of the portion of the surface of the object to a predefined accuracy (or resolution).” *Id.* at 20:38-43. Based on that determination, the method “discards . . . at least a portion of the second data” for “respective portions of the surface of the object for which the quantity or quality of the first data met the predefined threshold (e.g. the identified portions described above).” *Id.* at 21:34-38.

The limitations relevant to the present Motion are outlined in representative claim 11:¹⁰

11. A method, comprising:

[11.A] at a 3D scanner that includes one or more optical sensors:

[11.B] scanning, using the one or more optical sensors, an object having a surface, wherein the scanning generates first data corresponding to a three-dimensional (3D) shape of the surface of the object;

¹⁰ For the same reasons discussed *supra* note 7, the Court accepts claim 11 of the '357 Patent as representative.

[11.C] *for each of a plurality of respective portions of the surface of the object, determining whether a quantity of the first data meets a predefined threshold that corresponds to a quantity of data needed to reconstruct the 3D shape of the portion of the surface of the object to a predefined accuracy;*

[11.D] *after determining, for each respective portion of the plurality of portions of the surface of the object, whether the quantity of the first data meets the predefined threshold that corresponds to a quantity of data needed to reconstruct the shape of the portion of the surface of the object to the predefined accuracy, further scanning the object using the one or more optical sensors, wherein the further scanning generates second data corresponding to the 3D shape of the surface of the object; and*

[11.E] *discarding at least a portion of the second data, wherein the discarded portion of the second data corresponds to respective portions of the surface of the object for which the quantity of the first data met the predefined threshold.*

Id. at 23:25-51 (emphasis added).

b. Comparison of the Construed '357 Claim to the Accused Products

Defendants raise three arguments for summary judgment as to the non-infringement of the '357 Patent. *See* Mot. at 27-33. Defendants' first contention is that no reasonable jury could find that the Accused Products meet a "predefined threshold that corresponds to a quantity of data." *Id.* at 27; '357 Patent at 23:33-34. It is undisputed that all asserted claims of the '357 Patent include method step [11.C], which states that "for each of a plurality of respective portions of the surface of the object, determining whether a quantity of the first data meets a predefined threshold that corresponds to a quantity of data needed to reconstruct the 3D shape of the portion of the surface of the object to a predefined accuracy." '357 Patent at 23:31-36; 56.1 Resp. ¶ 14. It is also undisputed that all asserted claims of the '357 Patent includes method step [11.E], which involves "discarding at least a portion of the second data, wherein the discarded portion of the second data corresponds to respective portions of the surface of the object for which the quantity of the first data met the predefined threshold." 56.1 Resp. ¶ 15. Defendants contend that Plaintiff's expert,

Dr. Sadeghi, identifies only one predefined threshold in the Accused Products' source code that meets both the "determining" step of [11.C] and the "discarding" step of [11.E]: the "icp_min_overlap" parameter. Mot. at 27. Defendants further contend that because there is no evidence that the accused "icp_min_overlap" parameter corresponds to a "quantity of data" as required by the claims, summary judgment is appropriate. *Id.* at 27-29.

In response, Plaintiff raises genuine issues of material fact. First, Plaintiff disputes Defendants' contention that Dr. Sadeghi identified only one predefined threshold query within the Accused Products' source code that meets the limitations of claim 11. *See* Opp'n at 32-33; Sadeghi Report ¶¶ 152-54, 304-06, 308, 314; Sadeghi Deposition Excerpts at 184:16-185:12, 186:3-11, 191:21-193:21 (discussing the data sets and functions related to the "cloud_triface_count" parameter in which sets of "triangle" data are added or not added to a "triangulated mesh"). Second, Plaintiff disputes Defendants' assertion that "the icp_min_overlap parameter describes a degree of overlap between frames, and not a 'quantity of data,' let alone whether 'the quantity of the first data met the predefined threshold.'" Mot. at 28. As argued by Plaintiff, a "degree of overlap" between a first data and second data "inherently involves a determining of a *quantity* of the first data—i.e., th[e] quantity of the first data that it had in common with the second data." Opp'n at 33; *see also Markman* Order at 65 (finding that the term "quantity" as used in claim 11 of '357 Patent is governed by its plain and ordinary meaning). The fact that applying this predefined overlap threshold also involves the additional step of determining the quantity of the second data to determine whether the second data is itself usable does not necessarily negate infringement, for there are no restrictive limitations in the claim that preclude this step. *See Stiftung v. Renishaw PLC*, 945 F.2d 1173, 1178 (Fed. Cir. 1991) ("It is fundamental that one cannot avoid infringement merely by adding elements if each element recited in the claims is found in the

accused device.” (quoting *A.B. Dick Co. v. Burroughs Corp.*, 713 F.2d 700, 703 (Fed. Cir. 1983))). Accordingly, genuine issues of material fact remain as to whether the Accused Products meet a “predefined threshold that corresponds to a quantity of data.” ’357 Patent at 23:33-34.

Defendants’ second argument for the non-infringement of the ’357 Patent is that no reasonable jury could find the Accused Products meet a “predefined threshold” for each “portion of the surface.” *Id.* at 23:33-35; Mot. at 29-32. It is undisputed that all asserted claims of the ’357 Patent require the threshold determination to be performed for “each of a plurality of respective portions of the surface of the object.” 56.1 Resp. ¶ 14. Defendants contend that Dr. Sadeghi never explained, either in his report or at deposition, how the `icp_min_overlap` parameter would be separately defined for each portion. Mot at 31.

Contrary to Defendants’ position, Dr. Sadeghi discusses how the Accused Products meet this claim limitation. Dr. Sadeghi asserts that, for the `icp_min_overlap` threshold determination series of functions, the Accused Products gather data for respective portions of the surface of the object into respective “frames.” Sadeghi Report ¶¶ 300-03, 309-11, 315-17; Sadeghi Deposition Excerpts at 167:2-12, 168:16-171:8, 175:23-176:9, 198:8-199:14. Dr. Sadeghi further discusses how using frames for the data sets with the `icp_min_overlap` threshold is a different way of dividing the surface into prospective portions than the series of functions based on the “`cloud_triface_count`” threshold query, which use triangles as the data for each portion. Sadeghi Deposition Excerpts at 167:15-25, 174:25-175:7. Dr. Sadeghi also shows how the `icp_min_overlap` threshold is applied to the data for the frames. *Id.* at 197:25-199:14; 204:20-207:23, 208:20-209:5. Accordingly, genuine issues of material of fact remain as to whether the Accused Products meet a “predefined threshold” for each “portion of the surface.”

Defendants' third and final argument for the non-infringement of the '357 Patent is that no reasonable jury could find that the Accused Products "discard at least a portion of the second data." '357 Patent at 23:47; Mot. at 32-33. In arguing that there is no evidence that the Accused Products practice this claimed method, Defendants compare the analysis of their expert, Dr. Gortler, with that of Dr. Sadeghi. Mot. at 32-33. Defendants contend that Dr. Gortler performed testing and found that no actual "discarding" of data took place, while Dr. Sadeghi performed only a static analysis of the Accused Products' source code, without actually executing the code, to find the opposite. *Id.*; Gortler Non-Infringement Report ¶¶ 210-11; Sadeghi Report ¶¶ 114, 319-27. As stated by Defendants, "[t]he only evidence relat[ed] to *actual* data collection, as opposed to source code that may or may not be executed (and, even if executed, may or may not discard data)," supports the conclusion that the Accused Products do not practice the claimed method. Mot. at 33.

Plaintiff does not dispute that Dr. Gortler's test results show that in the normal mode of operation the "discarding" step is not performed by the Accused Products' software. *See* Opp'n at 38-39. In response to this evidence, Plaintiff notes "that "Dr. Sadeghi has shown that all the relevant routines run automatically in the software without any intervention or choice by the user" and that "Dr. Sadeghi also specifically identified software mechanisms in Defendants' source code that explicitly discard data." *Id.* at 38. As such, Plaintiff contends that "there is a reasonable inference that over the lifetime of use for a typical customer . . . data would get discarded according to the operation of the routines." *Id.* However, that argument misses the point. The law is clear that the capability of a product or system to practice a claimed method does not support a finding of infringement. *See ePlus, Inc. v. Lawson Software, Inc.*, 700 F.3d 509, 521 (Fed. Cir. 2012) (finding a verdict of infringement not supported by substantial evidence because "every

mention of the converting step in [plaintiff's] brief refers to the *capability* of the accused system, not an actual act of infringement"); *Fujitsu Ltd. v. Netgear Inc.*, 620 F.3d 1321, 1329 (Fed. Cir. 2010) (affirming summary judgment because capability is not enough to evidence "specific instances of direct infringement"); *Parallel Networks Licensing, LLC v. Microsoft Corp.*, 777 F. App'x 489, 493 (Fed. Cir. 2019) (affirming summary judgment on the same principle); *Paone v. Microsoft Corp.*, 881 F. Supp. 2d 386, 400-02 (E.D.N.Y. 2012) (granting summary judgment on the same principle). Therefore, even construing the evidence in a light most favorable to Plaintiff, there is no genuine dispute of material fact as to the literal non-infringement of the '357 Patent.

Literal infringement requires that every claim limitation is found in the Accused Products, *V-Formation*, 401 F.3d at 1312, and here, it is undisputed that is not the case, *see* 56.1 Resp. ¶ 15 ("All asserted claims of the '357 Patent (claims 11–15 and 17) require performing the step of 'discarding at least a portion of the second data. . . ."); Opp'n at 38 (arguing that there is only a reasonable inference that data would be discarded according to the operation of the Accused Product's routine). Accordingly, Defendants are entitled to summary judgment on Plaintiff's claim of literal infringement of the '357 Patent.

B. Patent Validity

The Court now turns to Defendants' arguments that Artec's '656 and '129 Patents are invalid. *See* Mot. at 11-15, 22-25. "[A]ny new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof" may be eligible for a patent. *See* 35 U.S.C. 101 ("Section 101"); *see also* *Diamond v. Chakrabarty*, 447 U.S. 303, 307-09 (1980) (describing how Congress intended patentable subject matter to "include anything under the sun that is made by man" (quoting S. Rep. No. 82-1979, at 5 (1952))). Section 101 nonetheless "contains an important implicit exception[:] Laws of nature, natural phenomena, and abstract ideas

are not patentable” because they represent “the basic tools of scientific and technological work.” *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013) (quoting *Mayo Collaborative Servs. v. Prometheus Lab’ys, Inc.*, 566 U.S. 66, 70-71 (2012)).

Courts engage in a two-step process to determine whether patent claims are valid under Section 101. *See Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 217-18 (2014). First, courts must determine whether the patent at issue is directed to an unpatentable law of nature, natural phenomenon, or abstract idea. *Id.* at 217. This inquiry does not “simply ask whether the claims involve a patent-ineligible concept.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016). Rather, it requires consideration of the claims “in their entirety to ascertain whether their character as a whole is directed to excluded subject matter.” *CardioNet, LLC v. InfoBionic, Inc.*, 955 F.3d 1358, 1367 (Fed. Cir. 2020) (quoting *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1312 (Fed. Cir. 2016)); *see also Contour IP Holding LLC v. GoPro, Inc.*, 113 F.4th 1373, 1379 (Fed. Cir. 2024) (warning that courts “must avoid describing the claims at a high level of abstraction, divorced from the claim language itself.”).

If a court determines that patent claims are directed to a patent-ineligible concept, it then moves on to *Alice* step two, which asks whether the claim recites an “inventive concept” sufficient “to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.” *CardioNet*, 955 F.3d at 1368 (quoting *Alice*, 573 U.S. at 217-18).

1. ’656 Patent

As discussed above, the ’656 Patent claims a system and method for the 3D measurement of material objects using structured light triangulation. *See generally* ’656 Patent. The claimed system embodies the principle of epipolar geometry, which holds that “if two cameras are looking at the same object or scene, it is possible to draw a straight line through any point in the image of

the one camera, with all points of the object or scene corresponding to that line lying along a straight line in the image of the other camera, regardless of the shape of the object or scene.” ’656 Patent at 5:11-16. According to Defendants, the ’656 Patent’s claims are ineligible under *Alice* as they merely apply this known geometric principle to the field of 3D scanning using conventional components such as a slide projector, camera, and computer. Mot. at 11-12; *see also* ’656 Patent at Fig 1.

a. *Alice* Step One

In asserting that the claims of the ’656 Patent are directed to an abstract idea, Defendants rely on *AI Visualize, Inc. v. Nuance Communications, Inc.*, 97 F.4th 1371 (Fed. Cir. 2024). In that case, the Federal Circuit stated that at *Alice* step one, a court must “determine if the claim’s character as a whole is directed to ineligible subject matter by considering the claim limitations that are purported to describe the claimed advance over the prior art.” *Id.* at 1378. Here, Defendants argue that the only claimed advance is the use of structured light patterns employing epipolar lines on a slide surface. Mot. at 11. This mathematical principle of epipolar geometry, Defendants contend, is a patent-ineligible abstract idea. *See In re Bd. of Trs. of Leland Stanford Junior Univ.*, 989 F.3d 1367, 1372 (Fed. Cir. 2021) (“Courts have long held that mathematical algorithms for performing calculations, without more, are patent ineligible under § 101.”).

However, in singling out the principle of epipolar geometry, Defendants effectively read out the other claim limitations. *See* Mot at 11-12. While this analysis follows the direction of *AI Visualize* by “considering the claim limitations that are purported to describe the claimed advance over the prior art,” 97 F.4th at 1378, reading out the other claim limitations contravenes established patent law. In *Powerblock Holdings, Inc. v. iFit, Inc.*, the Federal Circuit rejected a similar attempt to read out claim limitations in order to transform an asserted patent into an abstract idea. *See* 146

F.4th 1366, 1373 (Fed. Cir. 2025) (“We decline [defendant’s] invitation to read out or ignore limitations in claim 1 here merely because they can be found in the prior art.”). In doing so, the court noted that the other claim elements, even if they were found in prior art, provided structural limitations to the challenged claim. *See id.* (“[W]e have ‘cautioned that courts must be careful to avoid oversimplifying the claims by looking at them generally and failing to account for the specific requirements of the claims.’” (quoting *McRO*, 837 F.3d at 1313) (internal quotation omitted)).

This Court similarly rejects Defendants’ attempt to ignore the specific requirements of the challenged claim. Claim 1 of the ’656 Patent includes multiple limitations that provide structure to the asserted claim, namely, the use of a light projector, the use of a “slide with a slide pattern located on a slide surface,” and the slide pattern’s composition of “coded elements” characterized by a parameter that “defines a spatial or temporal distribution of an amplitude of a wavelength” of structured light. ’656 Patent at 8:17-21, 31-35. These claim limitations undercut Defendants’ contention that the asserted patent is directed to an abstract idea. *See PowerBlock*, 146 F.4th at 1373 (“[T]he *Alice* step one inquiry involves consideration of the claims ‘*in their entirety* to ascertain whether their character *as a whole* is directed to excluded subject matter.” (quoting *CardioNet*, 955 F.3d at 1367)).

Defendants’ analysis also improperly conflates the statutory requirements of novelty and nonobviousness with eligibility. *See Diamond v. Diehr*, 450 U.S. 175, 191 (1981) (“In this case, it may later be determined that the respondents’ process is not deserving of patent protection because it fails to satisfy the statutory conditions of novelty under § 102 or nonobviousness under § 103. A rejection on either of these grounds does not affect the determination that respondents’ claims recited subject matter which was eligible for patent protection under § 101.”); *Powerblock*,

146 F.4th at 1373 n.3 (“We caution parties and tribunals not to conflate the separate novelty and obviousness inquiries under 35 U.S.C. §§ 102 and 103, respectively, with the step one inquiry under § 101.”).

Accordingly, Defendants have not proven, as a matter of law, that the ’656 Patent is directed to an ineligible abstract idea under *Alice* step one, and the Court need not address *Alice* step two. Genuine issues of material fact therefore remain as to the validity of the ’656 Patent.

2. ’129 Patent

As discussed above, the ’129 Patent discloses “an object capturing system combined with, integrated with, and otherwise attached to or otherwise positioned alongside a display device,” with a corresponding method for capturing an object near a display device. ’129 Patent at 1:44-46, 1:54-55, 2:54-55. The ’129 Patent describes the functionality of the display device as “provid[ing] a reference position and/or a reference orientation for the position and orientation of object.” *Id.* at 3:50-52.

a. *Alice* Step One

In arguing that the claims of the ’129 Patent are directed to an unpatentable abstract idea under *Alice*, Defendants focus on the “provid[ing] a position and orientation” limitations. Mot. at 22. It is undisputed that these limitations are what distinguish the ’129 Patent from the prior art. *Id.*; Opp’n at 10. Defendants contend that because the claims are directed to providing instructions or other information to a user, they are unpatentable abstract ideas. *See, e.g., Elec. Commc’n Techs., LLC v. ShoppersChoice.com, LLC*, 958 F.3d 1178, 1181 (Fed. Cir. 2020) (finding the claims directed to the abstract idea of “providing advance notification of the pickup or delivery of a mobile thing”); *Int’l Bus. Machs. Corp. v. Zillow Grp., Inc.*, 50 F.4th 1371, 1378 (Fed. Cir. 2022) (finding the claims directed to the abstract idea of “limiting and coordinating the display of

information based on a user selection”); *F45 Training Pty Ltd. v. Body Fit Training USA Inc.*, 20-1194-WCB, 2022 WL 17177621, at *8 (D. Del. Nov. 17, 2022) (“[T]he general concepts of providing directions for exercises and varying exercise programs are clearly abstract ideas”).

While courts must examine a patent’s claimed advance over the prior art at *Alice* step one, *see TecSec, Inc. v. Adobe Inc.*, 978 F.3d 1278, 1292 (Fed. Cir. 2020), they must nonetheless avoid “overgeneralizing claims” and characterizing them at “a high level of abstraction” that is “untethered” from the claim language, *Enfish*, 822 F.3d at 1337; *see also McRO*, 837 F.3d at 1313. Here, in arguing that the “provid[ing] a position and orientation” claim limitations are directed to the abstract idea of providing instructions, Defendants improperly engage in an abstraction of the claims that is divorced from the claim language. *See Contour*, 113 F.4th at 1379. Instructions to users are nowhere in the claims. *See* ’129 Patent at 6:60-7:9, 7:32-8:8. Moreover, Plaintiff’s raise a genuine dispute as to whether, when viewed as a whole, the claims merely “provide instructions.” *See* Opp’n at 11 (arguing that the claims “‘are directed to a specific means or method that improves the relevant technology[]’ - specifically, the combination of both an object capturing system (or method) and a ‘display device’ that displays the position and orientation of the object to be scanned.”); ’129 Patent at 6:60-8:37.

Accordingly, Defendants have not proven, as a matter of law, that the ’129 Patent is directed to an ineligible abstract idea under *Alice* step one, and the Court need not address *Alice* step two. Genuine issues of material fact therefore remain as to the validity of the ’129 Patent.

II. Plaintiff’s Motion to Preclude Expert Testimony of Dr. Gortler

Plaintiff moves to preclude Defendants from offering the testimony of Dr. Gortler, Defendants’ expert on several infringement and invalidity issues. *See generally* Mot.to Preclude.

Courts must act as “a gatekeeper to exclude invalid and unreliable expert testimony.” *Bickerstaff v. Vassar Coll.*, 196 F.3d 435, 449 (2d Cir. 1999) (quoting *Hollander v. Am. Cyanamid Co.*, 172 F.3d 192, 202 (2d Cir. 1999)); *see* FED. R. EVID. 702. In doing so, the court “should undertake a rigorous examination of the facts on which the expert relies, the method by which the expert draws an opinion from those facts, and how the expert applies the facts and methods to the case at hand.” *Amorgianos v. Nat’l R.R. Passenger Corp.*, 303 F.3d 256, 267 (2d Cir. 2002); *see also* *Marini v. Adamo*, 995 F. Supp. 2d 155, 179 (E.D.N.Y. 2014) (“[U]nder Rule 702, the district court must make several determinations before allowing expert testimony: (1) whether the witness is qualified to be an expert; (2) whether the opinion is based upon reliable data and methodology; and (3) whether the expert’s testimony on a particular issue will assist the trier of fact.” (citing *Nimely v. City of New York*, 414 F.3d. 381, 396-97 (2d Cir. 2005)); *Choi v. Tower Rsch. Cap. LLC*, 2 F.4th 10, 20 (2d Cir. 2021) (“Expert testimony that usurps the role of the factfinder or that serves principally to advance legal arguments should be excluded.”).

Plaintiff contends that Dr. Gortler’s opinions should be excluded as invalid and unreliable because they rely on an erroneous claim construction of the ’656 Patent. *See* Mot. to Preclude at 17-18. Specifically, Plaintiff argues that because Dr. Gortler relied on the construction that “virtual lines” must “exist on the slide surface,” *Markman* Order at 13, 31, his opinions improperly assert legal conclusions, are not based on reliable data and methodology, and do not assist the trier of fact, *see* Mot. to Preclude at 17-18. In response, Defendants frame Plaintiff’s Motion to Preclude as an untimely motion for reconsideration of the Court’s *Markman* Order that would otherwise fail on the merits.

As discussed above, Dr. Gortler’s opinion that the ’656 Patent requires “virtual lines” to “exist on the slide surface” and Defendants’ corresponding theory of non-infringement is

consistent with dicta in the *Markman* Order. *See supra* section A.1.b. However, the Court has recognized that construction as erroneous. *See supra* note 8. Dr. Gortler's opinions relying on that construction are therefore unreliable and not helpful to the trier of fact, and they are hereby precluded on those grounds. *See Cordis Corp v. Bos. Sci. Corp.*, 658 F.3d 1347, 1357 (Fed. Cir. 2011) (disregarding an expert's testimony because it "was based on an incorrect understanding of the claim construction"); 523 *IP LLC v. CureMD.Com*, 48 F. Supp. 3d 600, 649 (S.D.N.Y. 2014) (refusing to consider an expert's opinions regarding infringement because the expert implicitly argued what claim construction should be and because the opinions were otherwise "irrelevant or unreliable, as they rel[ied] on a claim construction other than the Court's"); *Medisim Ltd. v. BestMed LLC*, 861 F. Supp. 2d 158, 171 (S.D.N.Y. 2012) (finding expert testimony that failed to apply the court's claim construction inadmissible as lacking reliable foundation).

Plaintiff separately contends that Dr. Gortler's opinion that the claims of the '656 Patent are invalid as being indefinite should be precluded because they are "based on entirely on his interpretation of [Plaintiff's] infringement contentions." Mot. to Preclude at 18. Specifically, Plaintiff argues that Dr. Gortler "completely fails to analyze the definiteness of these elements in light of any claim interpretation, official or proposed." *Id.* at 9. Plaintiff asserts that Dr. Gortler's invalidity opinions on these claim elements should therefore be precluded because they lack reliability and will not assist the trier of fact. *Id.* at 18.

The parties do not dispute that "infringement and invalidity are separate matters under patent law." *Commil USA, LLC v. Cisco Sys. Inc.*, 575 U.S. 632, 643 (2015); Mot. to Preclude at 18; Mot. to Preclude Opp'n at 13. However, the Federal Circuit has also noted that "nothing precludes [a defendant] from arguing for a narrower application of [a] limitation [in] the infringement context, while also arguing, in the alternative, that—if the district court were to

disagree—the patent claim would be so broad as to be invalid.” *Stryker Corp v. Zimmer, Inc.*, 782 F.3d 649, 658 n.4 (Fed. Cir. 2015), *vacated in part on other grounds and remanded sub nom., Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 579 U.S. 93 (2013); *see also 01 Communique Lab’y, Inc. v. Citrix Sys., Inc.*, 889 F.3d 735, 742 (Fed. Cir. 2018) (“A litigant [may argue] that if a claim term must be broadly interpreted to read on an accused device, then this same broad construction will read on the prior art.”); *GeigTech E. Bay LLC v. Lutron Elecs. Co.*, 18 Civ. 05290 (CM), 2023 WL 6614486, at *34-35 (S.D.N.Y. Sept. 20, 2023) (denying a motion to exclude testimony of an expert that provided alternative theories of non-infringement and invalidity, as the approach was approved in *Communique*).

Here, Dr. Gortler determined that Plaintiff’s infringement theory required reading “virtual line[s] . . . defined on the slide surface” and the “coded elements . . . located along” such “virtual line[s]” in such a way that they could be met by “any possible epipolar line that can be drawn through any coded elements on the slide surface.” Declaration of Richard de Bodo, Exhibit G ¶¶ 126, 130, Dkt. 163-9 (“Gortler Invalidity Report”). Under this theory, he concluded that “the claims are indefinite because one could pick literally any epipolar lines among an infinite set of possible epipolar lines; call those epipolar lines ‘virtual lines’; and hope that a few of the ‘coded elements’ in the structured light pattern happen to be located along those lines.” *Id.* ¶ 130 (emphasis omitted). Similarly, Dr. Gortler determined that under Plaintiff’s infringement theory the “[first/second] group[s]’ of ‘coded elements’” could be met by “any two or more (broadly defined) features in a structured-light pattern, which display any degree of overlap with any one epipolar line.” *Id.* ¶ 137. From this, Dr. Gortler concluded that “the claims are indefinite because for any structured-light pattern, one could draw literally **any** epipolar lines and follow those lines until they touch **any two** features of the pattern, where a feature may be any portion of the

structured light pattern.” *Id.* ¶ 140. Dr. Gortler’s alternative invalidity opinion, drawn from Plaintiff’s own infringement theory, is therefore permissible. *See GeigTech*, 2023 WL 6614486, at *34-35; *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1351 (Fed. Cir. 2001) (“[T]he claims must be interpreted and given the same meaning for purposes of both validity and infringement analyses.”); *Liebel–Flarsheim Co. v. Medrad, Inc.*, 481 F.3d 1371, 1380 (Fed. Cir. 2007) (explaining that an infringement plaintiff must “beware of what [it] asks for” since a broad claim construction for infringement purposes may ultimately result in a determination of patent invalidity).

CONCLUSION

For the foregoing reasons, Defendants’ Motion is granted in part and denied in part, and Plaintiff’s Motion to Preclude is granted in part and denied in part. Specifically, Defendants are granted summary judgment on the literal non-infringement of the ’357 Patent and denied summary judgment as to all remaining claims.

By April 27, 2026, the parties shall file a joint letter indicating the number of days needed for trial on Plaintiff’s claims related to the ’656 Patent, the ’129 Patent, and to the extent Plaintiff asserts infringement under the doctrine of equivalents, the ’357 Patent. *See supra* note 6.

SO ORDERED.

April 19, 2026
Brooklyn, New York

/s/
ORELIA E. MERCHANT
United States District Judge