NOT FOR PUBLICATION

UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

BLUE 425 LLC, Plaintiff, v. TRUMPF PHOTONICS, INC. et al., Defendants.	**Civil Action No. 25-15066 (SRC)** **OPINION & ORDER**

CHESLER, U.S.D.J.

This matter comes before the Court on the application for claim construction by Plaintiff Blue 425 LLC ("Blue") and Defendants Trumpf Inc., Trumpf Photonics, Inc., and Trumpf SE & Co. KG (collectively, "Trumpf"). The parties request claim construction of one disputed claim term in U.S. Patent No. 11,654,489 ("the '489 patent"). For the reasons that follow, the Court finds that the term, "laser light source," has its ordinary meaning and that its scope is not limited to Raman lasers.

ANALYSIS

I. The law of claim construction

A court's determination "of patent infringement requires a two-step process: first, the court determines the meaning of the disputed claim terms, then the accused device is compared to the claims as construed to determine infringement." Acumed LLC v. Stryker Corp., 483 F.3d 800, 804 (Fed. Cir. 2007). "[W]hen the district court reviews only evidence intrinsic to the

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patent (the patent claims and specifications, along with the patent's prosecution history), the judge's determination will amount solely to a determination of law." Teva Pharms. USA, Inc. v. Sandoz, Inc., 135 S. Ct. 831, 841 (2015).

The focus of claim construction is the claim language itself:

> It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude. Attending this principle, a claim construction analysis must begin and remain centered on the claim language itself, for that is the language the patentee has chosen to 'particularly point[] out and distinctly claim[] the subject matter which the patentee regards as his invention.'

Innova/Pure Water, Inc. v. Safari Water Filtration Sys., 381 F.3d 1111, 1115-1116 (Fed. Cir. 2004) (citations omitted).

The Federal Circuit has established this framework for the construction of claim language:

> We have frequently stated that the words of a claim 'are generally given their ordinary and customary meaning.' We have made clear, moreover, that the ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application. The inquiry into how a person of ordinary skill in the art understands a claim term provides an objective baseline from which to begin claim interpretation. . .
>
> In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words. In such circumstances, general purpose dictionaries may be helpful. In many cases that give rise to litigation, however, determining the ordinary and customary meaning of the claim requires examination of terms that have a particular meaning in a field of art. Because the meaning of a claim term as understood by persons of skill in the art is often not immediately apparent, and because patentees frequently use terms idiosyncratically, the court looks to those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean. Those sources include the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning

relevant scientific principles, the meaning of technical terms, and the state of the art.

Phillips v. AWH Corp., 415 F.3d 1303, 1312-1314 (Fed. Cir. 2005) (citations omitted).

II. Claim construction of the disputed terms

The parties dispute the meaning of the term, "laser light source," which appears in claim 1:[1]

1. A system for forming a part, the system comprising:

    a. a **laser light source** that generates a coherent beam of visible light having a wavelength greater than 400 nm and less than 750 nm and a power of at least about 100 W;

    b. an area for holding a metallic solid substrate, whereby the metallic solid substate is in optical communication with the coherent beam;

    c. a scanning module downstream of said **laser light source**, wherein said scanning module is adapted to generate a scanning motion of the coherent beam with respect to the area, which scanning motion corresponds to a predetermined pattern for the part; and,

    d. a computer control system operatively coupled to the **laser light source** and the scanning module, wherein the computer control system is configured to: (i) control the scanning motion; and (ii) control the power of the coherent beam at the area;

    e. wherein the system is configured for the coherent beam at the area to melt, soften or both the metallic solid substrate to thereby form the part from the metallic solid substrate.

Plaintiff proposes that "laser light source" has its plain meaning, which is "a source that generates a coherent beam of visible light." Defendants propose that the term means: "a Raman laser light source."

In short, the gist of this claim construction dispute is this single question: is the term

[1] This term also appears in unasserted claims 15 and 20.

"laser light source" limited to Raman lasers? There does not appear to be any other dispute of substance about the meaning of "laser light source." The parties do not discuss or dispute the definition of "Raman" as an attribute of lasers, but appear to agree that Raman laser light sources are one category of laser light sources among others.[2] The parties do not raise any other questions about the meaning of "laser."

Defendant begins its argument in favor of restricting the construction of "laser light source" to Raman lasers with this statement: "The fundamental question before this Court is whether Nuburu invented a 3D printing system that may use any generic laser or a 3D printing system using a specific type of laser (namely, a Raman laser)." (Defs.' Br. at 12.) The Court contrasts this assertion with what the Federal Circuit has held is fundamental to claim construction:

> A court construing a patent claim seeks to accord a claim the meaning it would have to a person of ordinary skill in the art at the time of the invention. The inquiry into the meaning that claim terms would have to a person of skill in the art at the time of the invention is an objective one. This being the case, a court looks to those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean. Those sources include the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.

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[2] The patent specification states:

> In some embodiments, a device for generating visible laser radiation comprises an array of visible laser diodes, a beam forming system and a beam convertor that uses stimulated Raman scattering (SRS) to combine the outputs of the individual laser diodes into a single mode output.

'489 patent, col.2 ll.53-57. The parties have briefed this matter without discussion or dispute about the definition of "Raman laser."

Innova/Pure Water, Inc. v. Safari Water Filtration Sys., 381 F.3d 1111, 1116 (Fed. Cir. 2004) (citations omitted).

Furthermore, under Federal Circuit law, there are only two exceptions to the general rule of ordinary meaning:

> Claim terms are generally given their plain and ordinary meanings to one of skill in the art when read in the context of the specification and prosecution history. There are only two exceptions to this general rule: 1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of the claim term either in the specification or during prosecution.

Golden Bridge Tech., Inc. v. Apple Inc., 758 F.3d 1362, 1365 (Fed. Cir. 2014) (citations omitted). In short: "The patentee is free to choose a broad term and expect to obtain the full scope of its plain and ordinary meaning unless the patentee explicitly redefines the term or disavows its full scope." Thorner v. Sony Comput. Entm't Am. LLC, 669 F.3d 1362, 1367 (Fed. Cir. 2012).

Thus, pursuant to Thorner, this Court will give the term "laser light source" the full scope of its ordinary meaning – as Plaintiff proposes – unless Defendants can demonstrate that the patentees explicitly redefined the term or disavowed its full scope during prosecution. To cut right to the chase, this Court finds that Defendants have failed to persuade that the patentees explicitly redefined the term or disavowed its full scope during prosecution, and so, under Thorner, the term "laser light source" will be given the full scope of its ordinary meaning.

Defendants' opening brief presents three arguments in favor of limiting the scope of the term, "laser light source," to Raman lasers, but none of these arguments relies on one of the three options available under Federal Circuit law (ordinary meaning, lexicography/redefinition, or

disavowal/prosecution disclaimer). As a result, none of these arguments succeeds.

Defendants' first argument relies on a document in the prosecution history which Defendants call "the '311 provisional application." This document, which Defendants attached in Exhibit F, appears to be provisional application number 61/817,311, filed April 29, 2013. The '489 patent claims priority to the '311 provisional application, which, according to the USPTO Patent Center website,[3] is the parent application to two relevant child applications (as well as others), 14/787,393 (which matured into the '536 patent) and 17/195,412 (which matured into the '489 patent).

In this first argument, Defendants point to the fact that 49 out of 50 proposed claims submitted with the '311 provisional application expressly specify that the laser is a Raman laser, and that the proposed specification references Raman lasers at a number of points. The problem for Defendants is that their opening brief does not state a legal theory that explains how these aspects of the '311 provisional application should impact the present claim construction analysis. As to the '311 provisional application, Defendants do not propose that this is evidence of the ordinary meaning of "laser light source," that it shows a redefinition of "laser light source," nor that this is a piece of prosecution history that evidences an unmistakable disavowal of claim scope under Federal Circuit law. As a result, Defendants have failed to demonstrate that their observations about the '311 provisional application are relevant to the present claim construction inquiry.

[3] The parties each submitted selected documents from the '489 file wrapper, and this Court took judicial notice under Fed. R. Evid. 201(b) of the entire '489 file wrapper, which is a public record available on the USPTO website (https://patentcenter.uspto.gov/). See Mobility Workx, LLC v. Unified Patents, LLC, 15 F.4th 1146, 1151 (Fed. Cir. 2021) (documents published on the USPTO's website may be judicially noticed under Fed. R. Evid. 201(b)).

Defendants' second argument focuses on the specification of the '489 patent and contends that many embodiments in the specification are expressly described as Raman lasers, and that the non-Raman lasers mentioned in the specification are either disparaged or unable to satisfy the limitations of claim 1. Again, this Court inquires, what is the legal theory that connects these observations to the present Markman analysis? Defendants write: "In cases like this, where the patent-at-issue exclusively focuses on one type of device, the Federal Circuit has determined that the claims should be so limited."[4] (Defs.' Br. at 17.) At the outset, there are two problems with Defendants' argument. First, Defendants' brief expressly acknowledges[5] that the specification of the '489 patent does refer to at least one embodiment that does not require a Raman laser. By Defendants' own admission, the patent at issue does not exclusively focus on Raman laser devices. But, more importantly, Defendants have overlooked that Federal Circuit law repeatedly cautions against importing claim limitations from the embodiments disclosed in the specification:

> We also acknowledge that the purpose underlying the *Texas Digital* line of cases--to avoid the danger of reading limitations from the specification into the claim--is sound. Moreover, we recognize that the distinction between using the specification to interpret the meaning of a claim and importing limitations from the specification into the claim can be a difficult one to apply in practice. *See Comark Communs., Inc. v. Harris Corp.*, 156 F.3d 1182, 1186-87 (Fed. Cir. 1998) ("there is sometimes a fine line between reading a claim in light of the specification, and reading a limitation into the claim from the specification"). However, the line between construing terms and importing limitations can be

[4] Defendants' brief then cites as an exemplary case Quanergy Sys. v. Velodyne Lidar USA, Inc., 24 F.4th 1406, 1414 (Fed. Cir. 2022). In short, Quanergy does not stand for the proposition that, if all embodiments in a specification share a specific characteristic not expressed in the claims, that characteristic should be imported into the claims as a limitation. That decision states clearly: "The Board did not read limitations from a preferred embodiment into the claims." Id. at 1416.

[5] See Defs.' Br. at 16: "The only non-Raman laser disclosed as having a power of at least 100 Watts is the conventional infrared (IR) laser mentioned in Table 2."

> discerned with reasonable certainty and predictability if the court's focus remains on understanding how a person of ordinary skill in the art would understand the claim terms. For instance, although the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments. In particular, we have expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment. That is not just because section 112 of the Patent Act requires that the claims themselves set forth the limits of the patent grant, but also because persons of ordinary skill in the art rarely would confine their definitions of terms to the exact representations depicted in the embodiments.
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> To avoid importing limitations from the specification into the claims, it is important to keep in mind that the purposes of the specification are to teach and enable those of skill in the art to make and use the invention and to provide a best mode for doing so. One of the best ways to teach a person of ordinary skill in the art how to make and use the invention is to provide an example of how to practice the invention in a particular case. Much of the time, upon reading the specification in that context, it will become clear whether the patentee is setting out specific examples of the invention to accomplish those goals, or whether the patentee instead intends for the claims and the embodiments in the specification to be strictly coextensive. The manner in which the patentee uses a term within the specification and claims usually will make the distinction apparent. *See Snow v. Lake Shore & Mich. S. Ry. Co.*, 121 U.S. 617, 630, 30 L. Ed. 1004, 7 S. Ct. 1343, 1887 Dec. Comm'r Pat. 354 (1887) (it was clear from the specification that there was "nothing in the context to indicate that the patentee contemplated any alternative" embodiment to the one presented).
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> In the end, there will still remain some cases in which it will be hard to determine whether a person of skill in the art would understand the embodiments to define the outer limits of the claim term or merely to be exemplary in nature. While that task may present difficulties in some cases, we nonetheless believe that attempting to resolve that problem in the context of the particular patent is likely to capture the scope of the actual invention more accurately than either strictly limiting the scope of the claims to the embodiments disclosed in the specification or divorcing the claim language from the specification.

Phillips v. AWH Corp., 415 F.3d 1303, 1323-24 (Fed. Cir. 2005) (citations omitted). In line with the teachings of Phillips, this Court observes that there is a very good reason in this case to conclude that the patentees did not intend for "the embodiments to define the outer limits of the claim term," "laser light source." The prosecution history shows that, when the patentees filed

continuation application 17/195,412 on March 8, 2021, the majority of the claims expressly required the use of stimulated Raman scattering, but, on October 18, 2021, the patentees cancelled every pending claim and submitted new claims in which the word "Raman" does not appear. Yes, the word "Raman" continued to appear in the specification, but that word did not appear in the claims, nor does it today. Defendants have not persuaded this Court that, under Federal Circuit law, this Court should re-insert a limitation into the claims that the patentees removed during prosecution. Because Defendants have failed to point out anything in the prosecution history that meets the Federal Circuit's standard for finding prosecution disclaimer, the Court finds that the most salient and relevant event in the prosecution history is the patentees' October 18 removal of the Raman limitation from the claims. The Court agrees with Plaintiff that the claim language of the '489 patent "was intentionally made broader than the Raman laser light source of its parent patent." (Pl.'s Resp. Br. at 1-2.)

The subheading for Defendants' third argument states: "In the Prosecution History, the Applicant Confirmed the Invention Was To a Raman Laser To Overcome Prior Art." (Defs.' Br. at 19.) The argument that follows, however, neither cites nor applies the Federal Circuit law of prosecution disclaimer in the Markman context. To be fair, Defendants' opening brief does not expressly claim to offer a prosecution disclaimer argument.[6] But, if this argument about prosecution history does not apply the Federal Circuit's law of prosecution disclaimer[7] in the

[6] It is not until Defendants' responsive brief that the word "disclaimer" first appears. Defendants' opening brief contains no uses of the words, "disclaim," "disclaimer," "disavow," or "disavowal."

[7] The Federal Circuit has summarized the key principles of the prosecution disclaimer analysis as follows:

> "[W]here the patentee has unequivocally disavowed a certain meaning to obtain

Markman context, the Court is at a loss to understand how Defendants' third argument is relevant to the claim construction of "laser light source." Defendants have not offered the Court a legal justification for considering this excursion into prosecution history that – despite the subheading – does not attempt to demonstrate a clear and unmistakable disclaimer of claim scope.[8]

Defendants' brief also includes arguments that, should the Court adopt Plaintiff's proposed construction, some claims will become invalid for lack of enablement or insufficiency of written description under § 112. The Federal Circuit has stated:

> Courts should be cautious not to allow claim construction to morph into a mini-trial on validity. Claim terms should be given their plain and ordinary meaning to one of skill in the art at the relevant time and cannot be rewritten by the courts to save their validity.

> his patent, the doctrine of prosecution disclaimer attaches and narrows the ordinary meaning of the claim congruent with the scope of the surrender." *Omega Eng'g, Inc, v. Raytek Corp*., 334 F.3d 1314, 1324 (Fed. Cir. 2003). This doctrine of prosecution disclaimer "precludes patentees from recapturing through claim interpretation specific meanings disclaimed during prosecution." *CUPP Computing AS v. Trend Micro Inc.*, 53 F.4th 1376, 1382 (Fed. Cir. 2022).
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> Key here, "[w]hen the prosecution history is used solely to support a conclusion of patentee disclaimer, the standard for justifying the conclusion is a high one." *Avid Tech., Inc. v. Harmonic, Inc.*, 812 F.3d 1040, 1045 (Fed. Cir. 2016). A patentee will only be bound to a disavowal that is both "clear and unmistakable." *CUPP Computing AS*, 53 F.4th at 1382. Thus, where "the alleged disavowal is ambiguous, or even amenable to multiple reasonable interpretations, we have declined to find prosecution disclaimer." *Avid Tech., Inc.*, 812 F.3d at 1045.

Maquet Cardiovascular LLC v. Abiomed Inc., 131 F.4th 1330, 1339 (Fed. Cir. 2025). Defendants have made no demonstration that the prosecution history evidences the "clear and unmistakable" disavowal of claim scope required by Federal Circuit law to narrow the scope of a claim term.

[8] Defendants mix into this "Prosecution History" section of the brief materials alleged to be evidence of statements made by the inventors outside the context of patent prosecution. (See Defendants' Br. at 22-23.) Because Defendants have offered no clear and unmistakable intrinsic evidence of prosecution disclaimer, the Court will not consider this extrinsic evidence.

Hill-Rom Servs. v. Stryker Corp., 755 F.3d 1367, 1374 (Fed. Cir. 2014). Defendants will have the opportunity to make their patent invalidity challenges at summary judgment or at trial.

In 1886, the Supreme Court's Justice Bradley famously wrote:

> Some persons seem to suppose that a claim in a patent is like a nose of wax which may be turned and twisted in any direction, by merely referring to the specification, so as to make it include something more than, or something different from, what its words express. The context may, undoubtedly, be resorted to, and often is resorted to, for the purpose of better understanding the meaning of the claim; but not for the purpose of changing it, and making it different from what it is. The claim is a statutory requirement, prescribed for the very purpose of making the patentee define precisely what his invention is; and it is unjust to the public, as well as an evasion of the law, to construe it in a manner different from the plain import of its terms.

White v. Dunbar, 119 U.S. 47, 51-52, 7 S. Ct. 72, 74-75 (1886). Defendants have argued that the claim term, "laser light source," should be made to include something different from what its words express. In short, this Court finds that Defendants have not demonstrated that the patentees redefined "laser light source" or narrowed its scope during prosecution, and so the Court concludes that "laser light source" has its ordinary meaning or, as Justice Bradley phrased it, "the plain import of its terms."

In conclusion, the Court construes "laser light source" as having its ordinary meaning, without restriction to Raman lasers. Because the parties have not disputed what the ordinary meaning of "laser light source" is, the Court need not mandate a particular definition of the claim term.

SO ORDERED.

s/ Stanley R. Chesler
STANLEY R. CHESLER, U.S.D.J.

Dated: October 29, 2026