

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

ROCHE DIABETES CARE, INC.,

Plaintiff,
Counterclaim-Defendant,

v.

TRIVIDIA HEALTH, INC.,

Defendant,
Counterclaim-Plaintiff.

Civil Action No. 24-668-GBW

UNSEALED ON 7/16/2025

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MEMORANDUM OPINION

June 6, 2025
Wilmington, Delaware

ROCHE 1080
ROCHE v. TRIVIDIA
IPR2025-00553



GREGORY B. WILLIAMS
UNITED STATES DISTRICT JUDGE

Pending before the Court are two joint claim construction briefs submitted by the parties,¹ including Joint Claim Construction Brief Regarding Roche's Asserted Patents (U.S. Patent Nos. 7,727,467 and 7,892,849) (D.I. 86) and Joint Claim Construction Brief for Trividia Health Inc.'s Asserted Patent (D.I. 89, regarding U.S. Patent No. 8,128,981), and three supplemental claim construction briefs, including Trividia's Supplemental Claim Construction Brief in Support of its Positions in the Joint Claim Construction Brief for Trividia Health Inc.'s Asserted Patent (D.I. 99), Trividia's Supplemental Claim Construction Brief Regarding the '849 Patent (D.I. 113), and Roche's Supplemental Claim Construction Brief (D.I. 116) (all five briefs together, the "Claim Construction Briefs").

The Claim Construction Briefs contain eleven disputed terms from U.S. Patents Nos. 7,727,467 ("the '467 patent") and 7,892,849 ("the '849 patent") (together, "Roche's Asserted Patents") and U.S. Patent No. 8,128,981 ("the '981 patent") ("Trividia's Asserted Patent") (together with Roche's Asserted Patents, the "Parties' Asserted Patents"). The Court held a claim construction hearing on April 30, 2025. Below, the Court describes whether, how and why it will construe the disputed terms from the Parties' Asserted Patents. The Court writes for the benefit of the parties and assumes their familiarity with this action.

¹ The Plaintiff / Counterclaim-Defendant is Roche Diabetes Care, Inc. ("Roche"). The Defendant / Counterclaim-Plaintiff is Trividia Health, Inc. ("Trividia").

I. LEGAL STANDARDS

Below are the legal standards for (A) claim construction and (B) indefiniteness.

A. Claim Construction

“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.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quotation marks and citation omitted); *see also Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257 (Fed. Cir. 1989) (“A claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using, or selling the protected invention”). “[T]here is no magic formula or catechism for conducting claim construction.” *Phillips*, 415 F.3d at 1324. The Court is free to attach the appropriate weight to appropriate sources “in light of the statutes and policies that inform patent law.” *Id.* The ultimate question of the proper construction of a patent is a question of law, although “subsidiary factfinding is sometimes necessary.” *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 326 (2015) (citing *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996)).

“The words of a claim are generally given their ordinary and customary meaning as understood by a person of ordinary skill in the art when read in the context of the specification and prosecution history.” *Thorner v. Sony Comput. Ent. Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012) (citing *Phillips*, 415 F.3d at 1312-13). A person of ordinary skill in the art “is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” *Phillips*, 415 F.3d at 1313.

When construing claim terms, the court first looks to, and primarily relies on, “the intrinsic evidence, including the claims themselves, the specification, and the prosecution history of the patent, which is usually dispositive.” *Sunovion Pharms., Inc. v. Teva Pharms. USA, Inc.*, 731 F.3d

1271, 1276 (Fed. Cir. 2013). “Other claims of the patent in question, both asserted and unasserted, can . . . be valuable” in discerning the meaning of a disputed claim term because “claim terms are normally used consistently throughout the patent,” and so, “the usage of a term in one claim can often illuminate the meaning of the same term in other claims.” *Phillips*, 415 F.3d at 1314. In addition, “[d]ifferences among claims can also be a useful guide.” *Id.* “For example, the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim.” *Id.* at 1314-15.

In addition to the claim, the Court should analyze the specification, which “is always highly relevant to the claim construction analysis . . . [as] it is the single best guide to the meaning of a disputed term.” *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). It is also possible that “the specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess” and, in “such cases, the inventor’s lexicography governs.” *Phillips*, 415 F.3d at 1316. “Even when the specification describes only a single embodiment, [however,] the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction.” *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1372 (Fed. Cir. 2014) (cleaned up). And, the specification “is not a substitute for, nor can it be used to rewrite, the chosen claim language.” *SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004).

The Court “should also consider the patent’s prosecution history, if it is in evidence.” *Markman*, 52 F.3d at 980. The prosecution history “can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution.” *Phillips*, 415 F.3d at 1317.

In some cases, the Court “will need to look beyond the patent’s intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period.” *Teva*, 574 U.S. at 331. Extrinsic evidence “consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” *Phillips*, 415 F.3 at 1317. Overall, while extrinsic evidence may be useful, it is “less significant than the intrinsic record in determining the legally operative meaning of claim language.” *Phillips*, 415 F.3 at 1317 (quotation marks and citations omitted).

B. Indefiniteness

Section 112 of the Patent Act requires that the claims of a patent “particularly point[] out and distinctly claim[] the subject matter which the inventor or a joint inventor regards as the invention.” 35 U.S.C. § 112(b). The “primary purpose of the definiteness requirement” that § 112(b) contains “is to ensure that the claims are written in such a way that they give notice to the public of the extent of the legal protection afforded by the patent, so that interested members of the public, e.g., competitors of the patent owner, can determine whether or not they infringe.” *All Dental Prodx, LLC v. Advantage Dental Prods., Inc.*, 309 F.3d 774, 779-80 (Fed. Cir. 2002) (citation omitted).

“[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). While a “potential infringer” need not “be able to determine *ex ante* if a particular act infringes the claims,” the patentee must “apprise the public of what is still open to them[]” such that “a person of ordinary skill in the art could determine whether or not an accused

product or method infringes the claim.” *Niazi Licensing Corp. v. St. Jude Med. S.C., Inc.*, 30 F.4th 1339, 1346-47 (Fed. Cir. 2022) (quotation marks and citations omitted).

Like claim construction, definiteness is a question of law, but courts must sometimes render factual findings based on extrinsic evidence to resolve the ultimate issue of definiteness. *See Sonix Tech. Co. v. Publications Int’l, Ltd.*, 844 F.3d 1370, 1376 (Fed. Cir. 2017). “Patent claims are presumed to be valid and definite.” *B.E. Tech., LLC v. Twitter Inc.*, No. 20-cv-621-GBW, 2024 WL 579076, at *1 (D. Del. Feb. 13, 2024) (citing 35 U.S.C. § 282). Thus, the challenger must prove indefiniteness by clear and convincing evidence. *See Nippon Shinyaku Co. v. Sarepta Therapeutics, Inc.*, No. 21-cv-1015-GBW, 2023 WL 4314485, at *6 (D. Del. July 3, 2023).

II. DISCUSSION

Herein, the Court construes the disputed terms from (A) Roche’s Asserted Patents and (B) Trividia’s Asserted Patent.

A. Roche’s Asserted Patents

The Court construes the following terms from Roche’s Asserted Patents: (1) “sample-receiving chamber,” (2) “covering a portion of the base substrate,” (3) “sandwiched between,” (4) “layer,” (5) “the two edges,” (6) “the web of capillary-defining material,” and (7) “the method comprising: (a); (b); (c); (d); (e); [and] f; [and (g)].”

1. “sample-receiving chamber”

Claim Term	Roche’s Construction	Trividia’s Construction	Court’s Construction
“sample-receiving chamber” ’467 patent (claims 1, 9-14, 17, 19, 21-22) ’849 patent (claim 1)	Plain and ordinary meaning	an area bounded by the base substrate and the [void]/[cavity] in the spacing layer	Plain and ordinary meaning, which is a chamber or compartment in which the sample is received. The sample-receiving chamber need not be bounded by the base substrate and the [void]/[cavity] in the spacing layer.

As depicted above, Roche contends that the Court should adopt the plain and ordinary meaning of the phrase “sample-receiving chamber.” D.I. 86 at 2. Trividia contends that the Court should construe the phrase as “an area bounded by the base substrate and the [void]/[cavity] in the spacing layer.” D.I. 86 at 2. For two key reasons, the Court adopts the plain and ordinary meaning of the phrase “sample-receiving chamber,” which is a chamber or compartment in which the sample is received, and where the sample-receiving chamber need not be bounded by the base substrate and the [void]/[cavity] in the spacing layer.

First, where a claim “is comprised of commonly used terms,” meaning that “each is used in common parlance and has no special meaning in the art,” no construction is necessary. *Summit 6, LLC v. Samsung Elecs. Co.*, 802 F.3d 1283, 1291 (Fed. Cir. 2015); *accord Phillips*, 415 F.3d at 1314 (explaining that “readily apparent” terms require “little more than the application of the widely accepted meaning of commonly understood words”). Notably, this Court has previously determined that the term “chamber,” though in other contexts, does not require construction. *See, e.g., Harvest Techs., Corp. v. Thermogenesis Corp.*, No. 12-cv-1354-GMS, D.I. 65 at 9-10 (D. Del. Sept. 22, 2014) (Ex. 8) (holding there is “no need to provide further construction” of the term

“chamber” because a “jury can understand [that] common word[]”); *EIS, Inc. v. IntiHealth Ger GmbH*, No. 19-cv-1227-GBW, 2023 WL 346631, at *16 (D. Del. Jan. 9, 2023) (seeing “no reason to depart from the term[] [chamber’s] plain and ordinary meaning” because “‘chamber’ is a nontechnical, plain-English word that is consistently used to mean ‘compartment’”).

Here, as in *Harvest Technologies* and *EIS*, there is “no need to provide further construction” of the term “chamber” because a “jury can understand [that] common word.” See *Harvest Techs.*, No. 12-cv-1354-GMS, D.I. 65 at 9-10; *EIS, Inc.*, 2023 WL 346631, at *16. Likewise, the meaning of “sample-receiving” is “readily apparent” and requires “little more than the application of the widely accepted meaning of commonly understood words.” See *Phillips*, 415 F.3d at 1314. Together, then, the meaning of “sample-receiving chamber” is likewise “readily apparent” and requires “little more than the application of the widely accepted meaning of commonly understood words.” *Id.*; see *Eko Brands, LLC v. Adrian Rivera Maynez Enterprises, Inc.*, 946 F.3d 1367, 1372-73 (Fed. Cir. 2020) (affirming “plain and ordinary” construction of “brewing chamber” as “a compartment in which brewing occurs”).

Second, the specifications of the ’467 and ’849 patents support the plain and ordinary meaning, since they reference the chamber as the space in which the sample is received.² For example, the specifications state that the test “strip comprises a small body defining a chamber in which the sample fluid is received for testing” and that this chamber “is filled with the sample fluid by suitable means.” ’467 patent, 7:27-30; see *id.* at 5:46-48 (“One component of the system is an electrochemical sensor including a sample-receiving chamber for the sample fluid.”); *id.* at 9:62-63 (“the sample fluid enters the sample-receiving chamber”); *id.* at 12:27-28 (“sample fluid enters and moves into the sample-receiving chamber”).

² The ’467 and ’849 patents share a common specification. See D.I 86 at 1.

Trividia contends that the asserted claims, and patent specifications, support construing “sample-receiving chamber” to mean “an area bounded by the base substrate and the [void]/[cavity] in the spacing layer.” D.I. 86 at 2, 6. Trividia’s underlying reasoning, however, is strained. Regarding the asserted claims, Trividia first relies on claim 1 of the ’467 patent, which recites “a spacing layer overlying the base substrate and having a void that at least *partially* defines a sample-receiving chamber.” D.I. 86 at 6 (emphasis added) (quoting claim 1 of the ’467 patent). Trividia’s reliance is flawed because claim 1 expressly recites that the “void” only “partially defines” the “sample-receiving chamber.” The same problem arises with respect to claim 1 of the ’849 patent, which similarly recites that the “the cavity at least *partially* defines a sample receiving chamber.” (emphasis added). Trividia also contends that claims 9 and 10 of the ’467 patent — which recite “an adhesive layer” that “forms a seal around the peripheral edge of the sample-receiving chamber” — support Trividia’s proposed construction. D.I. 86 at 6. Again, however, the referenced limitation expressly undermines Trividia’s position because, if anything, it is not the *void* that might define the outer boundary of the chamber, but rather, the *peripheral edge*. That claims 17 and 18 of the ’467 patent recite various heights for the sample receiving chamber does not mean, as Trividia contends (D.I. 86 at 6), that the sample receiving chamber must be defined by a void.

The specifications likewise do not support Trividia’s position. Trividia underscores that the specifications state that “[t]he spacing layer includes a void portion to provide a sample-receiving chamber extending between the base substrate and the covering layer.” D.I. 86 at 6 (quoting ’467 patent Ex. 1 at 7:41-44). However, that a void provides for a chamber does not mean that the boundary of the chamber is delineated, somehow, by that void. Space does not circumscribe itself, and even Trividia appears to agree (somewhat contradictorily) by contending

that a chamber “must have *defined* boundaries on its sides.” D.I. 86 at 11 (emphasis added). Trividia’s reliance on the other portions of the specifications (D.I. 86 at 6-8) suffer the same fatal shortcomings discussed above in that they, for example, rely on a void that partially defines the sample-receiving chamber.

For the foregoing reasons, the Court adopts the plain and ordinary meaning of “sample-receiving chamber,” which is a chamber or compartment in which the sample is received, where the sample-receiving chamber need not be bounded by the base substrate and the [void]/[cavity] in the spacing layer.

2. “covering a portion of the base substrate”

Claim Term	Roche’s Construction	Trividia’s Construction	Court’s Construction
“covering a portion of the base substrate” ’467 patent (claim 1)	Plain and ordinary meaning	covering the opposite side edges and a dosing end edge of the base substrate	Plain and ordinary meaning, which is covering a part of the base substrate. The reagent layer need not extend to the dosing end edge of the base substrate.

Claim 1 of the ’467 patent recites:

A test strip, comprising:

a base substrate having a working electrode and a counter electrode formed thereon and having two opposite side edges and an end edge;

a spacing layer overlying the base substrate and having a void that at least partially defines a sample-receiving chamber;

a covering layer overlying the spacing layer; and

a reagent layer disposed in the sample-receiving chamber and covering a portion of the base substrate and at least one of the electrodes, the reagent layer extending under the spacing layer to the two side edges of the base

substrate and being sandwiched between the spacing layer and the base substrate.

As depicted above, Roche contends that the Court should adopt the plain and ordinary meaning of “covering a portion of the base substrate.” D.I. 86 at 12. Trividia contends that the Court should construe “covering a portion of the base substrate” to mean “covering the opposite side edges and a dosing end edge of the base substrate.” D.I. 86 at 12. Notably, then, Trividia only seeks construction of the word “portion.” For two key reasons, the Court adopts the plain and ordinary meaning.

First, the word “portion” is a “commonly used term[]” that “is used in common parlance and has no special meaning in the art.” *See Summit 6, LLC*, 802 F.3d 1283, 1291. As such, no construction is required. *Id.*

Second, other portions of claim 1, and also portions of claims 2 and 3, of the ’467 patent corroborate this conclusion. *See Phillips*, 415 F.3d at 1314 (explaining that “the usage of a term in one claim can often illuminate the meaning of the same term in other claims”). Regarding the former, claim 1 of the ’467 patent recites both that the reagent layer covers “a portion of the base substrate” and that the reagent layer (which is between the base substrate and the spacing layer) extends “to the two side edges of the base substrate.” As such, construing “portion” to include “to the two side edges of the base substrate” is superfluous and, thus, unnecessary. *In-Depth Test LLC v. Maxim Integrated, Prods., Inc.*, No. 14-cv-887-CFC, 2018 WL 5669165, at *3 (D. Del. Nov. 1, 2018) (explaining “claim construction principle that interpretations that render some portion of the claim language superfluous are disfavored” and refusing to construe “‘components’ to be necessarily ‘on a wafer’” because it would render other claims separately reciting components “‘on a wafer’ superfluous” (citation and some quotation marks omitted)).

Regarding the latter, claim 1 does not reference the “dosing end edge” contemplated by Trividia. However, claims 2 and 3 (which depend on claim 1) separately recite that the reagent layer “extends to the end edge of the base substrate” or has an end edge that “is aligned with the end edge of the base substrate.” ’467 patent, cls. 2-3. Because “the presence of a dependent claim that adds a particular limitation raises a presumption that the limitation in question is not found in the independent claim,” the Court does not construe the term “portion” to include the “dosing end edge” restriction. *See Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 910 (Fed. Cir. 2004); *see also AK Steel Corp. v. Sollac & Ugine*, 344 F.3d 1234, 1242 (Fed. Cir. 2003) (“[D]ependent claims are presumed to be of narrower scope than the independent claims from which they depend.”). In other words, the Court does not construe claim 1 to include the limitation found in claims 2 and 3. Moreover, the presumption (which the Court adopts) is “especially strong” here since “the only meaningful difference between” claim 1 and claims 2 and 3 is that the reagent layer in claims 2 and 3 extends “to the end edge.” *See SunRace Roots Enter. Co. v. SRAM Corp.*, 336 F.3d 1298, 1303 (Fed. Cir. 2003).

Trividia contends that the specification of the ’467 patent uniformly references that the reagent layer covers the opposite side edges and a dosing end edge of the base substrate as an aspect of the invention as a whole, and therefore, necessitates Trividia’s proposed construction. D.I. 86 at 16. Trividia cites (D.I. 86 at 16) *Chewy, Inc. v. Int’l Business Machines Corp.*, 94 F.4th 1354, 1360-61 (Fed. Cir. 2024), in which the Federal Circuit imported meaning from the specification where the specification uniformly referenced the invention as a whole. Trividia also cites (D.I. 86 at 16-17) *Abbott Lab ’ys v. Sandoz, Inc.*, 566 F.3d 1282, 1288 (Fed. Cir. 2009), which provides that a “court may reach a narrower construction, limited to the embodiment(s) disclosed

in the specification, when the claims themselves, the specification, or the prosecution history clearly indicate that the invention encompasses no more than that confined structure or method.”

Here, however, the specification of the ’467 patent expressly characterizes the instances where the reagent layer extends to the dosing end edge as “embodiments” or “forms of” the claimed invention and not as an aspect of the invention as a whole. *See, e.g.*, ’467 patent, 17:61-63 (“In the illustrated *embodiment*, the reagent layer extends to both side edges and the dosing edge of the test strip.” (emphasis added)), 2:47-61 (disclosing “one form”), 2:62–3:6 (disclosing a “preferred form”), 3:19-32 (disclosing a “preferred form”), 3:42-59 (disclosing “another form”), 4:19-22 (disclosing “preferred embodiments”). Embodiments, without more, do not restrict claim limitations. *See, e.g., Hill-Rom Servs., Inc.*, 755 F.3d 1367, 1372 (“Even when the specification describes only a single embodiment, [however,] the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction.”).

Moreover, that the specification teaches that “[t]he sample-receiving chamber includes a uniform reagent layer that avoids the undesirable edge and meniscus effects described” in the background section of the patent does not mean, as Trividia contends (D.I. 86 at 21), that the reagent layer must extend to side and dosing edges of the sample-receiving chamber. Critically, the specification of the ’467 patent teaches that the undesirable edge and meniscus effects are ameliorated *not* by extension of the reagent layer to the side and dosing edges of the base substrate, *but instead* by placing the reagent “onto the base substrate in a manner that positions the reagent composition between the base substrate and the space layer.” ’467 patent, 17:31-48; *see* ’467 patent 1:65–2:46 (“[O]ne prior art approach to forming the reagent layer is to deposit the same into the sample-receiving chamber after the latter is formed in the test strip. However, this can result

in a more uneven reagent layer due to phenomena such as the formation of a meniscus at the perimeter of the chamber, which in turn results in the reagent having a different thickness adjacent to the side walls of the chamber than in the interior portion. . . . The present invention provides a test strip having a small sample-receiving chamber less than 1 microliter, preferably less than 0.5 microliter. The sample-receiving chamber includes a uniform reagent layer that avoids the undesirable edge and meniscus effects described above.”). Furthermore, the undesirable edge effects contemplated by the background section of the ’467 patent regard “the *side walls* of the chamber” and not the dosing edge. ’467 patent, 2:4-5 (emphasis added).

Trividia postulates that “during prosecution of the ’467 patent, the applicant confirmed that ‘the edge quality of the reagent stripe is highly variable, depending upon many factors, such as the means used to apply the stripe, its viscosity and the like.’” D.I. 86 at 16 (citation omitted). Trividia thus contends that a POSA “would understand that the claimed invention requires extending the reagent strip to the opposite side edges and the dosing end edge of the base substrate to remedy these problems.” D.I. 86 at 16. However, as described in the preceding paragraph, the “edge quality” problem identified by the applicant is addressed *not* by extension of the reagent layer to the side and dosing edges of the base substrate, *but instead* by placing the reagent “onto the base substrate in a manner that positions the reagent composition between the base substrate and the space layer.” ’467 patent, 17:31-48; *see* ’467 patent 1:65–2:46.

For the foregoing reasons, the Court adopts the plain and ordinary meaning of “covering a portion of the base substrate,” which is covering a part of the base substrate, where the reagent layer need not extend to the dosing end edge of the base substrate.³

³ While the Court adopts Roche’s positions, not all of Roche’s arguments hold weight. For example, Roche contends that the reagent layer cannot always extend to the dosing end edge in

3. “sandwiched between”

Claim Term	Roche’s Construction	Trividia’s Construction	Court’s Construction
“sandwiched between” ’467 patent (claims 1, 9) ’849 patent (claims 18, 27)	Plain and ordinary meaning	positioned between without any intermediary	Plain and ordinary meaning, which is placed or positioned between. “Sandwiched between” allows for positioning with intermediaries.

The asserted claims recite, or depend on a claim reciting, a “test strip, comprising” or a “method of manufacturing a test strip, comprising,” a “reagent layer” that is “sandwiched between the spacing layer and the base substrate.” As depicted above, Roche contends that the Court should adopt the plain and ordinary meaning of “sandwiched between.” D.I. 86 at 23. Trividia contends that the Court should construe “sandwiched between” to mean “positioned between without any intermediary.” D.I. 86 at 23. For two key reasons, the Court adopts the plain and ordinary meaning.

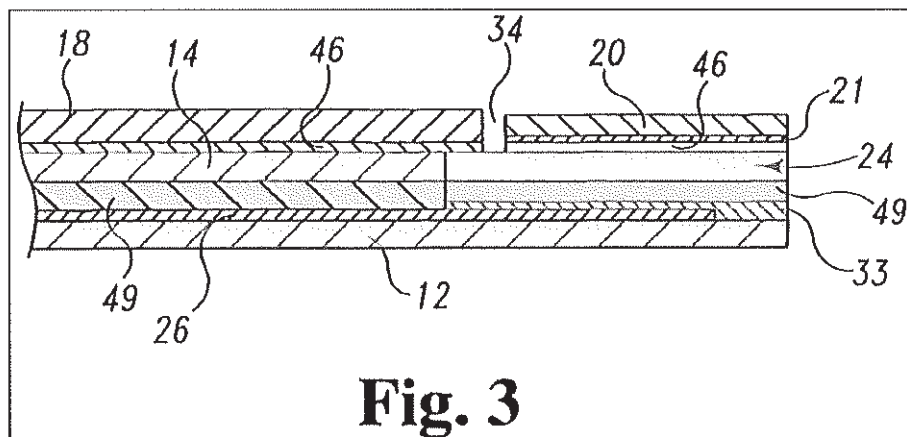
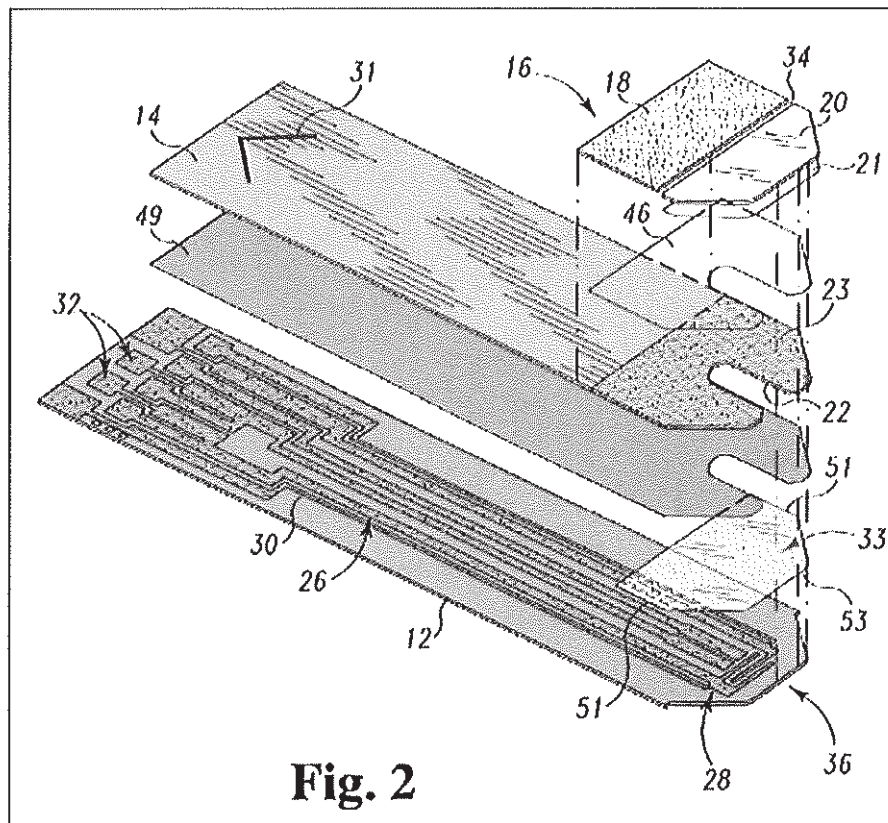
First, “sandwiched between” is a “commonly used term[]” that “is used in common parlance and has no special meaning in the art.” *See Summit 6, LLC*, 802 F.3d 1283, 1291. That

light of various embodiments that cover, for example, a “substantial[]” amount of the floor of the sample-receiving chamber. D.I. 86 at 19 (emphasis removed); *see* ’467 patent, 4:26-27 (describing an embodiment where the reagent is “substantially covering the entire floor of the sample-receiving chamber”); ’467 patent, 27:57-62 (describing that in “a preferred embodiment, the reagent layer is deposited as a continuous elongate stripe extending adjacent or close to the first web edge, and overlying the measuring electrodes formed on the patterned web”). However, as Trividia observes, these embodiments are not inconsistent with Trividia’s proposed construction, because such embodiments could extend to the three edges contemplated by Trividia’s proposed construction, and still cover only a portion of the floor of the base substrate.

common understanding, as Roche observes, “does not include a negative limitation that there be no other intermediary things.” D.I. 86 at 23. As such, no construction is required.

Second, claim 9 of the ’467 patent, which depends on claim 1, demonstrates that other items can be “sandwiched between” the base substrate and the spacing layer. In particular, claim 9 recites an “adhesive layer” that is also “sandwiched between the spacing layer and the base substrate.”

Third, Trividia’s construction would require that both the reagent layer and the adhesive layer are “positioned between” the base substrate and the spacing layer “without any intermediary.” Such construction is only possible (if the claims are to remain sensical) if the reagent layer and the adhesive layer are not overlapping. However, as depicted below, the annotations of Figures 2 and 3 from Roche accurately depict overlapping reagent and adhesive layers (in the annotated figures the base substrate is blue, the reagent level is orange, the adhesive layer is red, and the spacing layer is green). Since the reagent layer and adhesive layer are overlapping, Trividia’s construction is nonsensical. *See Becton, Dickinson & Co. v. Tyco Healthcare Grp., LP*, 616 F.3d 1249, 1255 (Fed. Cir. 2010) (“A claim construction that renders asserted claims facially nonsensical cannot be correct.” (quotation marks and citation omitted)).



Trividia contends that claims 1, 8 and 9 of the '467 patent, when considered together, require a more restrictive understanding of “sandwiched between.” D.I. 86 at 23. Claims 8 and 9 recite:

8. The test strip of claim 1, further comprising an adhesive layer disposed between the spacing layer and the base substrate.

9. The test strip of claim 8, wherein the adhesive layer is sandwiched between the spacing layer and the base substrate, the adhesive layer having an edge profile that is aligned with a peripheral edge of the sample-receiving chamber.

In particular, Trividia contends that since claim 8 recites “an adhesive layer disposed between” and that since claim 9 recites “the adhesive layer” as “sandwiched between,” that “sandwiched between” from claim 9 must have a “more restrictive” meaning than “disposed between.” D.I. 86 at 26. However, as described earlier in this section, Trividia’s construction would require that both the reagent layer and the adhesive layer are “positioned between” the base substrate and the spacing layer “without any intermediary” and the Court declines to adopt this nonsensical construction. *See Becton, Dickinson & Co.*, 616 F.3d 1249, 1255 (“A claim construction that renders asserted claims facially nonsensical ‘cannot be correct.’”).

Trividia also contends that, if “additional materials were, *e.g.*, placed between the reagent layer and the base substrate, the claimed invention would not function as the reagent layer must cover a portion of the base substrate’s electrodes for the test strip to generate an electrochemical signal indicated of the analyte in the sample fluid.” D.I. 86 at 27. However, Trividia’s argument does not foreclose additional materials between the reagent layer and the spacing layer (like the claimed adhesion layer).

For the foregoing reasons, the Court adopts the plain and ordinary meaning of “sandwiched between,” which is placed or positioned between and allows for positioning with intermediaries.

4. “layer”

Claim Term	Roche’s Construction	Trividia’s Construction	Court’s Construction
“layer” ’467 patent (claims 1, 5-10, 12-16, 23-25) ’849 patent (claims 1, 3, 4, 18-19, 27)	Plain and ordinary meaning	A thickness of material that is different from the material below or above it	Plain and ordinary meaning, which is a thickness of material. A layer, which may have multiple materials, may have the same or different material(s) from the material(s) below or above it. The thickness of the material(s) need not be different than the thickness of the material(s) below or above it.

As depicted above, Roche contends that the Court should adopt the plain and ordinary meaning of “layer.” D.I. 86 at 32. Trividia contends that the Court should construe “layer” to mean “[a] thickness of material that is different from the material below or above it.” D.I. 86 at 32. For the reasons discussed below, the Court adopts the plain and ordinary meaning of layer, which is a thickness of material, and may have multiple materials and may have the same or different material(s) from the material(s) below or above it. In addition, the thickness of the material(s) need not be different than the thickness of the material(s) below or above it.

First, “layer” is a “commonly used term[]” that “is used in common parlance and has no special meaning in the art.” *See Summit 6, LLC*, 802 F.3d 1283, 1291. As Roche observes, “one could have layers of paint” or “layers of clothing.” D.I. 86 at 33; *see States Roofing Corp. v. Winter*, 587 F.3d 1364, 1370-71 (Fed. Cir. 2009) (finding contract’s “reference to ‘3 Layers’ as requiring three layers of paint”).

Second, Trividia's construction is not entirely consistent with the specification, which discloses, for example, that different layers may share common materials. *See* '467 patent at 34:40-50 (listing "Melinex 329 or 339" for the spacing layer and cover layers); *compare id.* at 12:5-17 ("The spacing layer . . . may be made of . . . PET . . . foil"), *with id.* at 13:17-25 ("The body cover and chamber cover may be made of . . . foil of PET"). Thus, the intrinsic record does not support that "layers" means "different from the material below or above it."

Third, Trividia's construction improperly "muddles, rather than clarifies, the claim language." *See Immersion Corp. v. HTC Corp.*, No. 12-cv-259-RGA, 2015 WL 581572, at *5 (D. Del. Feb. 11, 2015). For example, Trividia's construction allows the interpretation that each layer only comprises one material, and at least some of the layers comprise multiple materials. As to those layers that include multiple materials, the question arises on whether all of the materials in each layer need to be distinct from all of the materials in the other layer, or only some of them, which could confuse the jury.

Trividia contends as "a matter of common sense, a layer must be distinct from the material above or below it" for otherwise neighboring layers "would not be layers at all because a POSITA would have no way to determine where one layer stopped and the next layer started." D.I. 86 at 34. The Court can imagine scenarios where layers of a common material, like a liquid, could merge. The asserted patents, however, recite layers with components that would not merge.

Trividia also contends that the asserted claims and specification of the '467 and '849 patents recite or disclose layers with different material and, therefore, support Trividia's construction. D.I. 86 at 34-35. However, that the asserted claims and specification recite or disclose layers with different materials only suggests that construing the term "layer" to require different materials is superfluous and, thus, unnecessary. *In-Depth Test LLC*, 2018 WL 5669165,

at *3. The same conclusion applies to Trividia’s argument regarding prosecution history. *See* D.I. 86 at 35.

For the foregoing reasons, the Court adopts the plain and ordinary meaning of layer, which is a thickness of material, and may have multiple materials and may have the same or different material(s) from the material(s) below or above it. In addition, the thickness of the material(s) need not be different than the thickness of the material below or above it.

5. “the two edges”

Claim Term	Roche’s Construction	Trividia’s Construction	Court’s Construction
“the two edges” '849 patent (claims 18, 27)	Not indefinite	Indefinite	Not indefinite.

As depicted above, Roche contends that the claim term “the two edges” is not indefinite. D.I. 86 at 38. Trividia contends that the claim term “the two edges” is indefinite. D.I. 86 at 38. For the reasons discussed below, the claim term “the two edges” is not indefinite.

Independent claims 18 and 27 of the '849 patent recite:

18. A method of manufacturing a test strip, comprising:

- (a) providing a web of base substrate material;
- (b) forming a plurality of sets of measuring electrodes on the web, each set comprising a working electrode and a counter electrode;
- (c) applying a continuous stripe of reagent material to the web such that said continuous stripe covers each of said plurality of sets of measuring electrodes;
- (d) providing a web of spacing material defining a plurality of capillary channels;
- (e) laminating the web of spacing material to the base substrate material such that each capillary channel at least partially overlays a set of electrodes;

(f) laminating a web of covering material to the spacing material to cover each of said capillary channels and thereby to define a plurality of capillary spaces;

wherein steps (a)-(f) provide a web of test strips, with each test strip comprising a base substrate, a set of measuring electrodes, a reagent layer, a spacing layer, a covering layer, and a capillary space, wherein the reagent layer extends under the spacing layer to the two edges of the base substrate and is sandwiched between the spacing layer and the base substrate; and

(g) separating the individual test strips from the web.

...

27. A method of manufacturing a test strip, comprising:

(a) providing a web of base substrate material;

(b) forming a series of sets of measuring electrodes on the web, each set comprising a working electrode and a counter electrode;

(c) applying a continuous stripe of reagent material to the web such that said reagent stripe covers each of said series of sets of measuring electrodes;

(d) providing a web of covering material defining with the base substrate material a series of capillary channels;

(e) laminating the web of capillary-defining material to the web of base substrate material such that each capillary channel at least partially overlays one set of measuring electrodes;

wherein steps (a)-(e) provide a web of test strips, with each test strip comprising a base substrate, a set of measuring electrodes, a reagent layer, and a capillary channel, wherein the reagent layer extends under the covering material to the two edges of the base substrate and is sandwiched between the covering material and the base substrate; and

(f) separating the individual test strips from the web.

Since these claims recite “a web of base substrate,” “sets of measuring electrodes on the web,” and “applying a continuous stripe of reagent material to the web such that said [reagent] stripe covers each of” the sets of electrodes, a POSA would understand that the reagent layer would

extend perpendicular to the “sets of measuring electrodes” in order to “cover[] each of” these sets of electrodes. By understanding the direction in which the reagent layer extends relative to the sets of measuring electrodes (and therefore, the base substrate), a POSA would be able to determine towards which “two edges” of the base substrate the reagent layer extends. Figure 8 from the '849 patent, as annotated by Roche (D.I. 86 at 40), exemplifies one possibility:

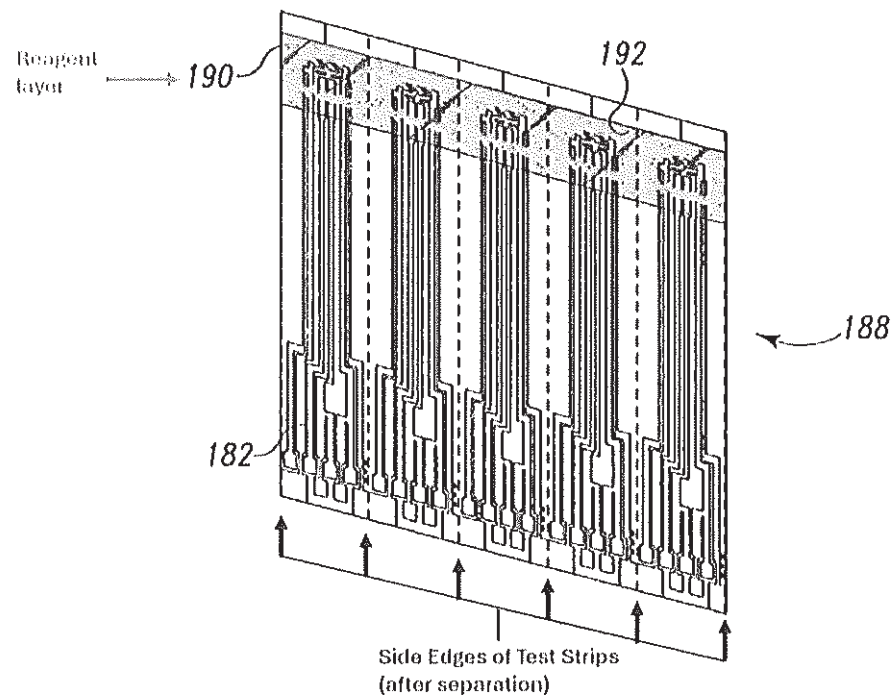


Fig. 8

Each of Trividia’s arguments fail. *First*, Trividia contends that “it is unclear as to what ‘two edges’ the claims are referring” because aside from the limitations in claims 18 and 27, the “term ‘edge’ does not otherwise appear in these claims,” and because the “claims also do not define the shape of the claimed base substrate.” D.I. 86 at 41. However, as explained above, by understanding the direction in which the reagent layer extends relative to the sets of measuring

electrodes (and therefore, the base substrate), a POSA would be able to determine which “two edges” the reagent layer extends towards.

Second, Trividia contends that the “specification also does not clearly define what the claimed ‘two edges’ are because the specification describes numerous components of the claimed inventions as having multiple edges.” D.I. 86 at 41. However, that various components of the claimed invention have multiple edges would not prevent a POSA from determining which of the “multiple edges” are referenced.

Third, Trividia rehashes these arguments in attempting to dispute Roche’s reliance on Figure 8. However, as described above, by understanding the direction in which the reagent layer extends relative to the sets of measuring electrodes (and therefore, the base substrate), a POSA would be able to determine which “two edges” the reagent layer extends towards. Trividia also contends that Figure 8 is not representative of all possible embodiments. D.I. 86 at 42 (“And while Roche relies upon Figure 8, the specification also explains that the ‘edges’ of the base substrate can be at the ‘top’ and ‘bottom’ of the web of base substrate, not just the ‘side edges’ of the base substrate.”). The Court agrees. However, that the “two edges” could also be at the “top” and “bottom” of the web of base substrate does not render “two edges” indefinite.

For the foregoing reasons, Trividia fails to demonstrate by clear and convincing evidence that “the two edges” is indefinite.

6. “the web of capillary-defining material”

Claim Term	Roche’s Construction	Trividia’s Construction	Court’s Construction
“the web of capillary-defining material” '849 patent (claim 27)	Not indefinite	Indefinite	Not indefinite.

Claim 27 of the '849 patent recites:

27. A method of manufacturing a test strip, comprising:

- (a) providing a web of base substrate material;
- (b) forming a series of sets of measuring electrodes on the web, each set comprising a working electrode and a counter electrode;
- (c) applying a continuous stripe of reagent material to the web such that said reagent stripe covers each of said series of sets of measuring electrodes;
- (d) providing a web of covering material defining with the base substrate material a series of capillary channels;
- (e) laminating the web of capillary-defining material to the web of base substrate material such that each capillary channel at least partially overlays one set of measuring electrodes;

wherein steps (a)-(e) provide a web of test strips, with each test strip comprising a base substrate, a set of measuring electrodes, a reagent layer, and a capillary channel, wherein the reagent layer extends under the covering material to the two edges of the base substrate and is sandwiched between the covering material and the base substrate; and

- (f) separating the individual test strips from the web.

As depicted above, Roche contends that “the web of capillary-defining material” is not indefinite. D.I. 86 at 46. Trividia contends that “the web of capillary-defining material” is indefinite. D.I. 86 at 46. For the reasons discussed below, “the web of capillary-defining material” is not indefinite.

As Roche contends (D.I. 86 at 46), “Trividia’s indefiniteness argument fails because, read in the context of the claim, a skilled artisan would understand with reasonable certainty that ‘the web of capillary-defining material’ refers to the ‘web of covering material defining . . . a series of capillary channels’ recited in step (d).” Indeed, patent law does not require that the antecedent basis for a term be identical to the term. *See, e.g., Energizer Holdings, Inc. v. Int’l Trade Comm’n*, 435 F.3d 1366, 1370-71 (Fed. Cir. 2006) (holding “that ‘anode gel’ is by implication the antecedent basis for ‘said zinc anode’”); *Simpson Strong-Tie Co. Inc. v. Columbia Ins. Co.*, No. 2023-1944,

2025 WL 39807, at *3 (Fed. Cir. Jan. 7, 2025) (finding a “joist” provided an antecedent for the phrase “the structural component” because “[t]hat is just what ‘a joist’—and only ‘a joist’—does.”). That the specification does not “clearly define” the disputed term (D.I. 86 at 48) is thus not dispositive here.

Trividia contends that “Roche’s argument is inconsistent with the plain language of the claim, which clarifies that while the web of covering material with the base substrate material defines a series of capillary channels, the ‘web of capillary-defining material’ expressly does not include the base substrate.” D.I. 86 at 48; *see* D.I. 86 at 50 (contending, in other words, that “the web of covering material and the web of base substrate” is “another possible antecedent”). Trividia’s argument, however, is specious. The “web of capillary-defining material” can only mean “the web of covering material defining . . . a series of capillary channels” for otherwise limitation (e) would require laminating “the base substrate material” to “the web of base substrate material,” which is nonsensical. *See Becton, Dickinson & Co.*, 616 F.3d 1249, 1255 (“A claim construction that renders asserted claims facially nonsensical ‘cannot be correct.’”). That Figure 10 from the specification illustrates the spacing layer as being “ready to be laminated to a web of base substrate material” (D.I. 86 at 48-49) does not affect this analysis.

For the foregoing reasons, Trividia fails to demonstrate by clear and convincing evidence that “the web of capillary-defining material” is indefinite.

7. “the method comprising: (a); (b); (c); (d); (e); [and] f; [and (g)]”

Claim Term	Roche’s Original Construction	Trividia’s Original Construction	Court’s Construction
“the method comprising: (a); (b); (c); (d); (e); [and] f; [and (g)]” '849 patent (claims 1, 18, 27)	Plain and ordinary meaning	Each step of the method must be performed in order	NA

Claim Term	Trividia’s Revised Construction	Roche’s Revised Construction	Court’s Construction
“the method comprising: (a); (b); (c); (d); (e); [and] f; [and (g)]” '849 patent (claims 1, 18, 27)	<u>Claim 1:</u> Steps (a)-(c) are performed in order; Steps (d) and (e) are performed after Steps (a)-(c); Steps (d) and (e) can be performed either in order or simultaneously; and Step (f) is performed after Steps (a)-(e). <u>Claim 18:</u> Steps (a)-(c) are performed in order; Steps (d), (e), and (f) are performed after Steps (a)-(c); Step (d) is performed before Steps (e)-(f);	<u>Claim 1:</u> Steps (a)-(c) are performed in order; Steps (d) and (e) are performed after Steps (a)-(c); Steps (d) and (e) can be performed either in order or simultaneously; and Step (f) is performed after Steps (a)-(e). <u>Claim 18:</u> Steps (a)-(c) are performed in order; Step (e) is performed after Steps (a)-(c); Steps (d) and (f) can be performed at any point before Step (e);	<u>Claim 1:</u> Steps (a)-(c) are performed in order; Steps (d) and (e) are performed after Steps (a)-(c); Steps (d) and (e) can be performed either in order or simultaneously; and Step (f) is performed after Steps (a)-(e). <u>Claim 18:</u> Steps (a)-(c) are performed in order; Step (e) is performed after Steps (a)-(c); Steps (d) and (f) can be performed before, at the same time as, or after, Steps (a)-(c); Step (d) is performed before, or at the same time as, Steps (e)-(f);

Step (f) of Claim 18 can be performed either after Steps (d) and (e); at the same time as Steps (d) and (e); or before Step (e); and Step (g) must be performed after Steps (a)-(f). <u>Claim 27:</u> Steps (a)-(c) are performed in order; Steps (d) and (e) are performed after Steps (a)-(c); Steps (d) and (e) can be performed either in order or simultaneously; and Step (f) is performed after Steps (a)-(e).	Step (f) of Claim 18 can be performed either after Steps (d) and (e); at the same time as Steps (d) and (e); or before Step (e); and Step (g) must be performed after Steps (a)-(f). <u>Claim 27:</u> Steps (a)-(c) are performed in order; Step (e) is performed after Steps (a)-(c); Step (d) can be performed at any point before Step (e); Steps (d) and (e) can be performed either in order or simultaneously; and Step (f) is performed after Steps (a)-(e).	Step (f) of Claim 18 can be performed either after Steps (d) and (e), at the same time as Steps (d) and (e), or before Step (e); and Step (g) must be performed after Steps (a)-(f). <u>Claim 27:</u> Steps (a)-(c) are performed in order; Step (e) is performed after Steps (a)-(c); Step (d) can be performed at any point before Step (e); Steps (d) and (e) can be performed either in order or simultaneously; and Step (f) is performed after Steps (a)-(e).
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In their Joint Claim Construction Brief Regarding Roche's Asserted Patents (D.I. 86), the parties proposed their original constructions as depicted in the first table above. The Court, during the April 30, 2025 *Markman* hearing, instructed the parties to file supplemental claim construction briefs regarding the parties' proposed constructions of the specific order, if any, of each step of claims 1, 18 and 27 of the '849 patent. The parties' updated proposals are shown in the second table above (the parties' disputes are bolded). Below, the Court briefly sets forth the law regarding whether the steps recited in a claim necessitate a particular order and, then, divides its analysis of the parties' disputed constructions, regarding the steps recited in claims 1, 18, and 27, into separate Sections for each claim.

The Federal Circuit has explained that “[u]nless the steps of a method actually recite an order, the steps are not ordinarily construed to require one.” *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1369 (Fed. Cir. 2003). In contrast, a “claim ‘requires an ordering of steps when the claim language, as a matter of logic or grammar, requires that the steps be performed in the order written, or the specification directly or implicitly requires’ an order of steps.” *Mformation Techs., Inc. v. Rsch. in Motion Ltd.*, 764 F.3d 1392, 1398 (Fed. Cir. 2014) (quoting *TALtech Ltd. v. Esquel Apparel, Inc.*, 279 F. App’x 974, 978 (Fed. Cir. 2008)); see also *Function Media, LLC v. Google, Inc.*, 708 F.3d 1310, 1320 (Fed. Cir. 2013) (concluding that a claim that recites “processing” an “electronic advertisement” necessarily indicates that “the creation of the ad must happen before the processing begins”).⁴

a. Claim 1

The Court adopts the parties’ proposed constructions (which are identical) regarding the steps of claim 1 of the ’849 patent. In particular, the Court construes that steps (a)-(c) are

⁴ Trividia cites several cases holding that a claim’s recitation of steps with cardinals or letters, supports that the steps are performed in order. D.I. 113 at 3-4; see, e.g., *Par Pharmaceutical, Inc. v. Baxter Healthcare Corp.*, No. 23-358-GBW-SRF, 2024 WL 4100255 at *5 (D. Del. Sept. 6, 2024) (“The use of ordinals in the claim language further confirms that the method steps must be performed sequentially as a matter of logic and grammar.”). That said, Trividia only proposes that *some* of the steps are performed in order. See, e.g., D.I. 113 at 1 (“Roche and Trividia both acknowledge that *certain* steps of the ’849 patent must occur in order.” (emphasis added)).

performed in order;⁵ steps (d) and (e) are performed after Steps (a)-(c);⁶ steps (d) and (e) can be performed either in order or simultaneously;⁷ and step (f) is performed after Steps (a)-(e)⁸.

b. Claim 18

Claim 18 of the '849 patent recites:

A method of manufacturing a test strip, comprising:

- (a) providing a web of base substrate material;
- (b) forming a plurality of sets of measuring electrodes on the web, each set comprising a working electrode and a counter electrode;
- (c) applying a continuous stripe of reagent material to the web such that said continuous stripe covers each of said plurality of sets of measuring electrodes;
- (d) providing a web of spacing material defining a plurality of capillary channels;
- (e) laminating the web of spacing material to the base substrate material such that each capillary channel at least partially overlays a set of electrodes;
- (f) laminating a web of covering material to the spacing material to cover each of said capillary channels and thereby to define a plurality of capillary spaces;

wherein steps (a)-(f) provide a web of test strips, with each test strip comprising a base substrate, a set of measuring electrodes, a reagent layer, a spacing layer, a covering layer, and a capillary space, wherein the reagent

⁵ The Court notes that Step (c) refers to Step (b) and Step (b) refers to Step (a), and each of these references use the definite article “the.” Such references support that the steps are performed in order. *See Medtronic, Inc. v. Teleflex Life Scis. Ltd.*, No. 22-1605, 2024 WL 1208642, at *3 (Fed. Cir. Mar. 21, 2024) (“Although not an ironclad rule, when the current step of a method claim refers to a previous step using the definite article ‘the,’ the claim language indicates that the previous step occurs sequentially before the current step.”).

⁶ The same logic from *supra* n.5 applies.

⁷ Nothing from these Steps or the specification requires otherwise.

⁸ The same logic from *supra* n.5 applies.

layer extends under the spacing layer to the two edges of the base substrate and is sandwiched between the spacing layer and the base substrate; and

(g) separating the individual test strips from the web.

The Court adopts the parties' proposed constructions that are identical. In particular, the Court construes that Steps (a)-(c) are performed in order;⁹ Step (f) of Claim 18 can be performed either after Steps (d) and (e), at the same time as Steps (d) and (e), or before Step (e);¹⁰ and Step (g) must be performed after Steps (a)-(f)¹¹.

Regarding the parties' (at least generally) disputed constructions, Trividia proposes that "[s]teps (d), (e), and (f) are performed after Steps (a)-(c)" and that "Step (d) is performed before Steps (e)-(f)." D.I. 113 at 1. Roche proposes, instead, that "Step (e) is performed after Steps (a)-(c)" and that "Steps (d) and (f) can be performed at any point before Step (e)." D.I. 116 at 2. These proposals overlap to the extent, and the Court construes, that Step (e) is performed after Steps (a)-(c).¹²

Otherwise, and contrary to Trividia's proposal, the Court does not construe that Steps (d) and (f) are performed after Steps (a)-(c). Step (d), which recites "providing a web of spacing material defining a plurality of capillary channels," does not regard or relate to the timing of Steps (a)-(c), which generally regard the base substrate layer. Step (f), which recites "laminating a web of covering material to the spacing material to cover each of said capillary channels and thereby

⁹ The same logic from *supra* n.5 applies.

¹⁰ While Step (f) cannot be performed before Step (d), nothing requires Step (f) to necessarily be performed before, at the same time as, or after, Step (e).

¹¹ The same logic from *supra* n.5 applies.

¹² The same logic form *supra* n.5 applies.

to define a plurality of capillary spaces,” likewise does not regard or relate to the timing of Steps (a)-(c).

Moreover, the Court construes that Step (d) is performed before, or at the same times as, Steps (e)-(f), since Step (d) provides the spacing material that is necessary for the laminating of the spacing material recited in Steps (e)-(f). Separately, Roche proposes that Step “(f) can be performed at any point before Step (e)” but that proposal is already reflected by the parties’ proposal, and the Court’s construction, that “Step (f) of Claim 18 can be performed either after Steps (d) and (e); at the same time as Steps (d) and (e); or before Step (e).”

The above constructions comport with the specification, which discloses a preferred embodiment in which “two or more basic components of the test strip are prepared simultaneously.” *See* ’849 patent, 17:1-13.

c. Claim 27

Claim 27 of the ’849 patent recites:

A method of manufacturing a test strip, comprising:

- (a) providing a web of base substrate material;
- (b) forming a series of sets of measuring electrodes on the web, each set comprising a working electrode and a counter electrode;
- (c) applying a continuous stripe of reagent material to the web such that said reagent stripe covers each of said series of sets of measuring electrodes;
- (d) providing a web of covering material defining with the base substrate material a series of capillary channels;
- (e) laminating the web of capillary-defining material to the web of base substrate material such that each capillary channel at least partially overlays one set of measuring electrodes;

wherein steps (a)-(e) provide a web of test strips, with each test strip comprising a base substrate, a set of measuring electrodes, a reagent layer, and a capillary channel, wherein the reagent layer extends under the

covering material to the two edges of the base substrate and is sandwiched between the covering material and the base substrate; and

(f) separating the individual test strips from the web.

The Court adopts the parties' proposed constructions that are identical. In particular, the Court construes that Steps (a)-(c) are performed in order;¹³ Steps (d) and (e) can be performed either in order or simultaneously;¹⁴ and Step (f) is performed after Steps (a)-(e)¹⁵. Regarding the parties' (generally) disputed constructions, Trividia proposes that "Steps (d) and (e) are performed after Steps (a)-(c)" (D.I. 113 at 1), whereas Roche proposes that "Step (e) is performed after Steps (a)-(c)" and that "Step (d) can be performed at any point before Step (e)" (D.I. 116 at 2). These proposals overlap to the extent, and the Court construes, that Step (e) is performed after Steps (a)-(c).

The only remaining dispute, then, is the order of Step (d). Roche is generally correct, and the Court construes, that Step (d) can be performed at any point before Step (e) (including before Steps (a)-(c)). The provision of the web of covering material, can, on its face, occur before any other Step. That the web of covering material acts in concert with the base substrate to define a series of capillary channels does not mean that the provision of the web of covering material must occur after the provision of the base substrate material. For example, should the provision of the web of covering material occur before the provision of the web of base substrate material, it is still conceivable that the two webs could define a series of capillary channels.

¹³ The same logic from *supra* n.5 applies.

¹⁴ Nothing from these Steps or the specification requires otherwise.

¹⁵ The same logic from *supra* n.5 applies.

The above constructions comport with the specification, which discloses a preferred embodiment in which “two or more basic components of the test strip are prepared simultaneously.” *See* ’849 patent, 17:1-13.

B. Trividia’s Asserted Patents

The Court construes the following terms from Trividia’s Asserted Patent: (1) “movement of a [first/second] processing source,” (2) “laser beam moved relative to the conductive layer along the [first/second] kerf,” (3) “conductive component,” and (4) “focused laser beam.”

1. “movement of a [first/second] processing source”

Claim Term	Trividia’s Construction	Roche’s Construction	Court’s Construction
“movement of a [first/second] processing source” ’981 patent, claim 1	Plain and ordinary meaning	“moving the parts of a [first/second] processing source, which excludes ablation by a broad field laser that passes through a mask”	“moving the parts of a [first/second] processing source, which excludes ablation by a stationary broad field laser that passes through a mask”

Claim 1 of the ’981 patent recites:

1. A method of manufacturing test strips, comprising:

forming a reel containing a conductive layer and a base layer;

forming a first conductive component, wherein the first conductive component includes at least one first boundary formed by the *movement of a first processing source* along the at least one first boundary and at least one second boundary formed by the *movement of a second processing source* along the at least one second boundary, the second processing source is not the same as the first processing source, and the at least one first boundary is not the same as the at least one second boundary;

forming a second conductive component, wherein the second conductive component includes at least one third boundary formed by the *movement of the first processing source* along the at least one third boundary and at least one fourth boundary formed by a third processing source not the same as

the first processing source, and the at least one third boundary is not the same as the at least one fourth boundary; and

forming a third conductive component, wherein the third conductive component includes at least one fifth boundary formed by the *movement of the second processing source* along the at least one fifth boundary and at least one sixth boundary formed by the third processing source not the same as the second processing source, and the at least one fifth boundary is not the same as the at least one sixth boundary.

Roche proposes a construction that it contends is “needed to prevent Trividia from reclaiming what the applicant unmistakably disclaimed during prosecution.” D.I. 89 at 2. “Holding patentees to their definitive statements made during prosecution protects the public and promotes the notice function of intrinsic evidence.” *Azurity Pharms., Inc. v. Alkem Lab'ys Ltd.*, 133 F.4th 1359, 1366 (Fed. Cir. Apr. 8, 2025). Thus, “where the patentee has unequivocally disavowed a certain meaning to obtain his patent, the doctrine of prosecution disclaimer attaches and narrows the ordinary meaning of the claim congruent with the scope of the surrender.”¹⁶ In this instance, as explained below, Roche, and its expert Dr. David Cunningham, contend that, during prosecution of the application corresponding to the '981 patent, the applicant committed a clear and unmistakable disclaimer when attempting to distinguish its claimed invention from U.S. Patent Publication No. 2005/0019953 (the “Groll Reference”). D.I. 89 at 8; *see* D.I. 87-5 at PageID 2411-2448 (Declaration of David Cunningham, Ph.D., Regarding Claim Construction).

¹⁶ *Maquet Cardiovascular LLC v. Abiomed Inc.*, 131 F.4th 1330, 1339 (Fed. Cir. 2025) (quoting *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1324 (Fed. Cir. 2003)); *see Int'l Bus. Machines Corp. v. Rakuten, Inc.*, No. CV 21-461-GBW, 2023 WL 3750906, at *12 (D. Del. June 1, 2023); *see also Int'l Bus. Machines Corp. v. Rakuten, Inc.*, No. CV 21-461-GBW, 2023 WL 3750906, at *12 (D. Del. June 1, 2023). “This inquiry is related to but distinct from the inquiry into what the prosecution history shows about a relevant artisan’s understanding of the claim language in context.” *K-fee Sys. GmbH v. Nespresso USA, Inc.*, 89 F.4th 915, 923 (Fed. Cir. 2023).

Specifically, Roche contends that, as a result of a prosecution disclaimer, unlike the “third processing source” limitation, the “movement of a [first/second] processing source” limitation does not cover “lasers that do *not* use moving parts such as broad field lasers passing through a mask” and does not cover “processing sources without moving parts, such as a broad field laser that passes through a mask.” D.I. 89 at 11 (first quote), 13 (second quote).

As noted earlier, Roche’s disclaimer contention is based on the Groll Reference. The Groll Reference “provides a test Strip for measuring a concentration of an analyte of interest in a biological fluid, wherein the test strip may be encoded with information that can be read by a test meter into which the test Strip is inserted.” Groll Reference, Abstract. The examiner characterized the Groll Reference throughout prosecution of the application corresponding to the ’981 patent. For example, the examiner’s statement of reasons for allowance wherein the Groll Reference is characterized as “[t]he most pertinent prior art” and as “teach[ing] that it is known to use a wide laser to ablate patterns in a conductive reel using a mask to define the pattern at one time.” D.I. 61-3 at PageID 997; *see* D.I. 89 at 11.

According to Roche, “Groll taught manufacturing blood glucose test strips using broad field laser ablation through a mask to selectively remove gold film from a substrate, thereby forming patterns of electrical components.” D.I. 89 at 8. Roche highlights that “Groll’s broad field laser can ablate (i.e., remove) material from all of the electrode boundaries at once, *without moving the laser* along the boundaries during ablation—instead the *ribbon moves* so that another region of the ribbon can be ablated.” D.I. 89 at 9.

Roche asserts that, after a rejection based on the Groll Reference, “[t]he examiner allowed amended claim 18 (issued claim 1) based on the applicant’s representation that the amended claim

requires laser ‘movement,’ and excludes broad field lasers passing through a mask.” D.I. 89 at 11; *see* D.I. 61-3 at PageID 981 (amendment to claim 18), 989-90 (applicant’s remarks).

Amended claim 18 is reproduced below (D.I. 61-3 at PageID 981):

18. (Currently Amended) A method of manufacturing test strips, comprising:
- forming a reel containing a conductive layer and a base layer;
 - forming a first conductive component, wherein the first conductive component includes at least one first boundary formed by the movement of a first processing technique source along the at least one first boundary and at least one second boundary formed by the movement of a second processing technique source along the at least one second boundary, the second processing source is not the same as the first processing technique source, and the at least one first boundary is not the same as the at least one second boundary;
 - forming a second conductive component, wherein the second conductive component includes at least one third boundary formed by the movement of the first processing technique source along the at least one third boundary and at least one fourth boundary formed by a third processing technique source not the same as the first processing technique source, and the at least one third boundary is not the same as the at least one fourth boundary; and
 - forming a third conductive component, wherein the third conductive component includes at least one fifth boundary formed by the movement of the second processing technique source along the at least one fifth boundary and at least one sixth boundary formed by the third processing technique source not the same as the second processing technique source, and the at least one fifth boundary is not the same as the at least one sixth boundary.

The “representation” that Roche refers to is reproduced below:

Independent claim 18 has been amended to recite forming at least two boundaries of three conductive components using the movement of two different processing sources along each boundary. Independent claim 35 has been amended to recite forming two kerfs using two different focused laser beams. In contrast, Groll forms electrical components using a broad field laser that passes through a mask. The broad field laser is required to achieve the close tolerances and high densities of electrical components necessary for Groll’s invention.

During ablation, a broad field laser does not move relative to the electrical component being formed. . . .

Because a broad field laser system uses no moving parts during ablation, Groll fails to disclose or suggest the movement of processing sources recited by claim 18. Groll also fails to disclose or suggest the focused laser beams recited by claim 35 because Groll's invention only works with a broad field laser.

D.I. 61-3 at PageID 989-90 (citations omitted).

Trividia disagrees. Trividia responds that its “statements during prosecution do not amount to [] a disclaimer, but rather made explicit the meaning of the term that was already implicit in the patent.” D.I. 99 at 3 (cleaned up). According to Trividia, “the examiner cited Groll for its teachings regarding ‘using a single pass of the laser to create all of the structures’ and ‘forming multiple conductive layers on top of the conductive pattern described above that would also meet the limitations of the current claim.’” D.I. 89 at 18 (citation omitted). Trividia asserts that “[t]he applicant distinguished the claim because the claim language *required movement of different processing sources along the electrical boundaries*, while the prior art did not.” D.I. 89 at 18. Trividia also asserts that “[t]he examiner confirmed the inventive step is the number and movement of processing sources, not the specific *type*.” D.I. 89 at 18.

As “[t]he party seeking to invoke prosecution history disclaimer[,] [Roche] bears the burden of proving the existence of a clear and unmistakable disclaimer that would have been evident to one skilled in the art.” *Genuine Enabling Tech. LLC v. Nintendo Co.*, 29 F.4th 1365, 1374 (Fed. Cir. 2022) (quoting *Massachusetts Inst. of Tech. v. Shire Pharms., Inc.*, 839 F.3d 1111, 1119 (Fed. Cir. 2016)). “[T]his is a heavy burden.” *Merck KGaA v. Hopewell Pharma Ventures, Inc.*, No. CV 22-1365-GBW-CJB, 2024 WL 3967463, at *2 (D. Del. Aug. 28, 2024). “If the challenged statements are ambiguous or amenable to multiple reasonable interpretations, prosecution disclaimer is not established.” *Genuine Enabling Tech.*, 29 F.4th at 1374.

“[A]n applicant’s argument [during prosecution] that a prior art reference is distinguishable on a particular ground can serve as a disclaimer of claim scope even if the applicant distinguishes the reference on other grounds as well.” *Extang Corp. v. Truck Accessories Grp., LLC*, Civil Action No. 19-923 (KAJ), 2022 U.S. Dist. LEXIS 33382, at *11 (D. Del. Feb. 18, 2022) (alterations in original) (quoting *Traxcell Techs., LLC v. Nokia Sols. & Networks Oy*, 15 F.4th 1136, 1141 (Fed. Cir. 2021)). “Statements that clearly and unmistakably disavow claim scope to one skilled in the art are binding, ‘even if [the patentee] said more than needed to overcome a prior art rejection.’” *Azurity*, 2025 WL 1036994, at *4 (alterations in original) (quoting *Data Engine Techs. LLC v. Google LLC*, 10 F.4th 1375, 1383 (Fed. Cir. 2021)).

In this instance, considering the prosecution as a whole,¹⁷ the Court finds that Roche has proven the existence of a clear and unmistakable disclaimer. Specifically, when attempting to distinguish (what was then) claim 18 from the Groll Reference, the patent applicant clearly and unmistakably disavowed ablation by a stationary broad field laser that passes through a mask. Even assuming *arguendo* that Trividia has now put forward a colorable argument that the patent applicant could have traversed the Groll Reference without making such a disclaimer, “the scope of surrender is not limited to what is absolutely necessary to avoid a prior art reference; patentees may surrender more than necessary.” *Huawei Techs.*, 849 F.3d at 1359. Thus, considering the prosecution history as a whole, the ’981 patent is not amenable to another reasonable interpretation.

¹⁷ “When determining whether disclaimer applies, we consider the statements in the context of the entire prosecution.” *Tech. Properties Ltd. LLC v. Huawei Techs. Co.*, 849 F.3d 1349, 1357-58 (Fed. Cir. 2017); *see Azurity*, 2025 WL 1036994, at *4 (“Courts must take care, however, to interpret purported disavowals in the context of the prosecution history as a whole.”).

2. “laser beam moved relative to the conductive layer along the [first/second] kerf”

Claim Term	Trividia’s Construction	Roche’s Construction	Court’s Construction
“laser beam moved relative to the conductive layer along the [first/second] kerf” '981 patent, claim 18	Plain and ordinary meaning	“moving the beam of a [first/second] laser along the [first/second] kerf, which excludes a broad field laser that passes through a mask”	“moving the beam of a [first/second] laser along the [first/second] kerf, which excludes a stationary broad field laser that passes through a mask”

Claim 18 of the '981 patent recites:

18. A method of manufacturing test strips, comprising:

forming a reel containing a conductive layer and a base layer;

forming a first kerf in the conductive layer, wherein the first kerf is formed using a first focused *laser beam moved relative to the conductive layer along the first kerf*;

forming a second kerf in the conductive layer, wherein the second kerf is formed using a second focused *laser beam moved relative to the conductive layer along the second kerf*, the first laser beam being different to the second laser beam;

separating one or more test strips from the reel using a singulation process.

'981 patent, cl. 18 (emphases added).

In this instance, again, Roche proposes a construction that it contends is “needed to prevent Trividia from reclaiming what the applicant unmistakably disclaimed during prosecution.” D.I. 89 at 2. Specifically, Roche, and its expert Dr. David Cunningham, contend that, during prosecution of the application corresponding to the '981 patent, the applicant committed a clear and unmistakable disclaimer when attempting to distinguish its claimed invention from the Groll Reference. D.I. 89 at 30; *see* D.I. 87-5 at PageID 2411-2448.

Roche contends that, as a result of that disclaimer, claim 18 of the '981 patent "require[s] moving the beam of the laser" and "excludes a broad field laser that passes through a mask." D.I. 89 at 32. Specifically, Roche asserts that, after a rejection based on the Groll Reference, "[t]he examiner allowed amended claim 35 (issued claim 18) based on the applicant's representation that the amended claim requires *moving lasers* relative to the electrical component being formed." D.I. 89 at 30; *see* D.I. 61-3 at PageID 984 (amendment to claim 35), 989-90 (applicant's remarks).

Amended claim 35 is reproduced below (D.I. 61-3 at PageID 984):

35. (Currently Amended) A method of manufacturing test strips, comprising:
forming a reel containing a conductive layer and a base layer;
forming a first kerf in the conductive layer, wherein the first kerf is formed using a first focused laser ablation-process beam moved relative to the conductive layer along the first kerf;
forming a second kerf in the conductive layer, wherein the second kerf is formed using a second focused laser ablation-process beam moved relative to the conductive layer along the second kerf, the first laser beam being different to the second laser beam that is not the same as the first laser ablation-process;
separating one or more test strips from the reel using a singulation process.

The "representation" that Roche refers to is reproduced below:

Independent claim 35 has been amended to recite forming two kerfs using two different focused laser beams. In contrast, Groll forms electrical components using a broad field laser that passes through a mask. The broad field laser is required to achieve the close tolerances and high densities of electrical components necessary for Groll's invention.

During ablation, a broad field laser does not move relative to the electrical component being formed. . . .

Because a broad field laser system uses no moving parts during ablation, Groll fails to disclose or suggest the movement of processing sources recited by claim 18. Groll also fails to disclose or suggest the focused laser beams recited by claim 35 because Groll's invention only works with a broad field laser.

D.I. 61-3 at PageID 989-90 (citations omitted).

Trividia disagrees for the same reasons that it opposes applying the prosecution disclaimer doctrine against the “movement of a [first/second] processing source” term. *See* D.I. 99 at 4.

In this instance, considering the prosecution as a whole, the Court again finds the existence of a clear and unmistakable disclaimer. Specifically, when attempting to distinguish (then pending) claim 35 from the Groll Reference, the patent applicant clearly and unmistakably disavowed a stationary broad field laser that passes through a mask. Even assuming *arguendo* that Trividia has now put forward a colorable argument that the patent applicant could have traversed the Groll Reference without making such a disclaimer, “the scope of surrender is not limited to what is absolutely necessary to avoid a prior art reference; patentees may surrender more than necessary.” *Huawei Techs.*, 849 F.3d at 1359. Thus, considering the prosecution history as a whole, the ’981 patent is not amenable to another reasonable interpretation.

3. “conductive component”

Claim Term	Trividia’s Constructions	Roche’s Constructions	Court’s Constructions
“conductive component” ’981 patent (claims 1, 15)	Plain and ordinary meaning	“component configured to at least partially conduct an electrical signal”	Plain and ordinary meaning. No configuration other than the recited “forming” is required; no requirement to conduct an electrical signal.

As depicted above, Trividia contends that the Court should adopt the plain and ordinary meaning of “conductive component.” D.I. 89 at 40. Roche contends that the Court should construe “conductive component” to mean “component configured to at least partially conduct an electrical signal.” D.I. 89 at 40. For the reasons discussed below, the Court adopts the plain and ordinary

meaning in that no configuration other than the recited “forming” is required and there is also no requirement to conduct an electrical signal.

Roche’s argument rests on language from the specification which discloses that a “conductive component *can* include any structure configured to at least partially conduct an electrical signal.” ’981 patent at 4:16-18 (emphasis added). Contrary to Roche’s argument (D.I. 89 at 43), that the conductive component *can* be configured to at least partially conduct an electrical signal, however, does not mean that the conductive component *must* be configured to at least partially conduct the electrical signal. Therefore, as Trividia observes, Roche’s proposed construction “adds unnecessary complexity and a brand-new requirement that these components be ‘configured’ to partially conduct.” D.I. 89 at 42. And claims “cannot” be construed “to add a limitation not present in the claim itself.” *Nelcor Puritan Bennett v. Masimo Corp.*, 402 F.3d 1364, 1371 (Fed. Cir. 2005) (citation omitted). Roche similarly contends that the language in claim 1 requiring the “forming” of the conductive component supports that “conductive components” means “components configured to at least partially conduct an electrical signal.” D.I. 89 at 43. However, “forming” the conductive component is different than “configuring” the conductive component, and that the conductive component must be “formed” does not mean that it must be “configured.”¹⁸

Relatedly, Roche trumpets that the “claim language does not specify what the ‘conductive component’ is configured to conduct.” D.I. 89 at 43 (emphasis omitted). However, claims are generally not required to recite every limitation with “absolute precision.” *Interval Licensing LLC*

¹⁸ Roche similarly contends that “components configured to conduct electrical signals are what are needed to convey the signals generated by the reaction of glucose in the blood sample.” D.I. 89 at 44. However, Roche improperly assumes that, after formation of the conductive component, subsequent configuration is required.

v. AOL, Inc., 766 F.3d 1364, 1370 (Fed. Cir. 2014) (holding in the context of indefiniteness) (quoting *Nautilus*, 572 U.S. 898, 910). In fact, Roche’s Asserted Patents arguably recite a similar degree of imprecision in various claims, including, for example, claim 1 of the ’467 patent, which recites a “sample-receiving chamber” but does not specify what sample the chamber will be receiving. For these reasons, the Court will not construe “conductive component” in a manner that requires a certain type of energy to be conducted.¹⁹

4. “focused laser beam”

Claim Term	Trividia’s Constructions	Roche’s Constructions	Court’s Constructions
“focused laser beam” ’981 patent (claim 18)	Plain and ordinary meaning; not indefinite	Indefinite	Not indefinite.

Claim 18 of the ’981 patent recites (emphases added):

A method of manufacturing test strips, comprising:

forming a reel containing a conductive layer and a base layer;

forming a first kerf in the conductive layer, wherein the first kerf is formed using a first *focused laser beam* moved relative to the conductive layer along the first kerf;

forming a second kerf in the conductive layer, wherein the second kerf is formed using a second *focused laser beam* moved relative to the conductive layer along the second kerf, the first laser beam being different to the second laser beam;

separating one or more test strips from the reel using a singulation process.

¹⁹ In its Supplemental Claim Construction Brief, Trividia simply asserts that “Dr. Cunningham confirmed that he gave this term [i.e., conductive component], like the others, its ‘plain and customary meaning’ in his IPR Declaration.” D.I. 99 at 4.

As depicted above, Trividia contends that “focused laser beam” is not indefinite. D.I. 89 at 49. Roche contends that “focused laser beam” is indefinite. As discussed below, “focused laser beam” is not indefinite for at least three key reasons.

First, the specification reduces the alleged ambiguity in the ’981 patent’s recital of “focused laser beam” by describing the focused laser beam’s capability:

The laser ablation process can include a laser system. The laser system can include a laser source. The laser system can further include means to form trace, such as, for example, a focused beam, projected mask or other suitable technique. The use of a focused laser beam can include a device capable of rapid and accurate controlled movement to move the focused laser beam relative to conductive layer. For example, a scanner such as Hurry Scan (Scanlabs) may be used to direct the laser beam in direct write applications. The use of a mask can involve a laser beam passing through the mask to selectively ablate specific regions of conductive layer. A single mask can define trace, or multiple masks may be required to form trace. To form trace, the laser system can move relative to conductive layer. Specifically, the laser system, conductive layer, or both the laser system and conductive layer, may move to allow formation of trace, by laser ablation.

’981 patent at 9:46-63; *accord Interval Licensing LLC v.* 766 F.3d 1364, 1370 (explaining that the specification can inform whether a term is indefinite and that claims are generally not required to recite every limitation with “absolute precision” (quoting *Nautilus*, 572 U.S. 898, 910)).

Second, the specification exemplifies “devices available for such ablation techniques.” *Id.* at 9:64-67 (the exemplary devices include “a laser system available from LasX Industries, White Bear Lake, Minn. and laser micro machining systems from Exitech, Ltd.”); *Sonix Tech. Co. v. Publ’ns Int’l, Ltd.*, 844 F.3d 1370, 1379 (Fed. Cir. 2017) (holding that “two specific examples of” the allegedly indefinite term militated against indefiniteness). Dr. Cunningham likewise admits in his deposition that “the ‘boundary between a focused laser beam and one that is not a focused laser beam’ are ‘within the examples that are given in the ’981 patent and the file history.’” D.I. 99 at 5 (quoting D.I. 99-1 at 31:2-12); *see* D.I. 99-1 at 37:11–38:19 (“The examples in the ’981 patent

that were labeled as ‘focused laser beams’ would be understood by someone skilled in the art as being focused laser beams.”).

Third, the prior art confirms that a POSA would understand the meaning of “focused laser beam.” In fact, Roche has “filed multiple patents itself describing various methods of manufacturing test strips, including the precise ‘focused laser beam’ term it asserts here to be indefinite.” *See* D.I. 89 at 51 (citations omitted). Similarly, in his declaration to the Patent Trial and Appeal Board, Roche’s expert, Dr. Cunningham, relies upon multiple prior art references that likewise reference a focused laser beam. D.I. 87-11 Ex. F at 77 (“Moving focused laser beams and performing laser ablation, as taught by Boogaard, would have been an obvious way to form the kerfs shown in yellow in Bhullar Figure 4.”); *id.* at 77 (“Additionally, both Kickelhain and Winarta describe the process of scanning with a focused laser beam to create patterned metallization on substrate surfaces.”).

In fact, Dr. Cunningham even opines how a POSA would have used a “focused laser beam.” *See* D.I. 87-11 Ex. F at 69 (“Therefore, a person of ordinary skill in the art would have consulted the prior art, at the direction of Bhullar, for suitable laser ablation techniques, including use of a focused laser beam.”); *id.* at 80 (“Faced with the decision of selecting a laser that is suitable for ablating a wide area, that can also ablate both metal and some of support substrate (plastic), a person of ordinary skill in the art would have considered known suitable laser ablation techniques, including the use of a focused laser beam.”); *id.* at 83 (“Therefore, a person of ordinary skill in the art would have been motivated to select a CO2 laser as taught by Angell, as a second focused laser beam for ablating plastic to form recesses 35 as Bhullar teaches.”); *but see MPH Techs. Oy v. Apple, Inc.*, No. 18-cv-05935-TLT, 2024 U.S. Dist. LEXIS 200375, at *13 (N.D. Cal. Aug. 16, 2024) (explaining that “under relevant Federal Circuit case law, PTAB is not necessarily supposed

to decide indefiniteness unless it is ‘logically impossible for the Board to reach such a decision’” (quoting *Intel Corp. v. Qualcomm Inc.*, 21 F.4th 801, 813 (Fed. Cir. 2021))).

Roche contends that Trividia’s reliance on the prior art is improper. D.I. 89 at 55. However, Roche is wrong. See *Guangdong Alison Hi-Tech Co. v. ITC*, 936 F.3d 1353, 1360 (Fed. Cir. 2019) (“To be sure, patents with claims involving terms of degree must [generally] provide objective boundaries for those of skill in the art in the context of the invention. Intrinsic evidence—such as the claims, figures, written description, or prosecution history of a patent—can provide the necessary objective boundaries. *Extrinsic evidence* can also help identify objective boundaries.” (emphasis added) (citations and quotation marks omitted)). Roche also attempts to negate the import of prior references, stating that “Roche is not arguing that ‘focused laser beam’ is always indefinite in other contexts.” D.I. 89 at 55. That Roche does not argue that its own patents are indefinite, for example, is not surprising. However, such non-argument does not negate the import of prior references in ascertaining how a POSA would understand a term. See *Guangdong Alison Hi-Tech Co.*, 936 F.3d 1353, 1360,

Roche’s primary contention is that “focused laser beam” is indefinite because it “is a term of degree where some laser beams are sufficiently ‘focused’ to a certain beam width and other laser beams (such as ‘broad field laser’ beams) are too broad to be ‘focused.’” D.I. 89 at 53-54. As Roche observes (D.I. 89 at 53), dependent claims 21 and 22 explain that a focused laser beam may have a “beam width [of] at least approximately 20 micro-meters” or a “beam width [of] at least approximately 100 micro-meters.” The specification also states that “the width of the second laser beam may be at least as wide as the diffusion distance for the specific reagent,” i.e., “~100 micro-meters wide,” and the first laser beam may be “~20 micro-meters wide.” ’981 patent at 10:30-39. As such, Roche contends that “a competitor would be left to wonder whether a laser

beam of 200 micro-meters, or 500 micro-meters, or 1,000 micro-meters is a ‘focused laser beam.’” D.I. 89 at 54. However, the Federal Circuit has “rejected the proposition that claims involving terms of degree are inherently indefinite.” *Sonix*, 844 F.3d at 1377 (finding that examples of “visually negligible” indicators in the specification were enough to demonstrate that a POSITA would understand the term with reasonable certainty). Here, as discussed above, a POSA would understand the meaning of “focused laser beam” on the basis of the specification and the prior art.

For these reasons, Roche fails to demonstrate by clear and convincing evidence that “focused laser beam” is indefinite.

Roche otherwise requests (in its sur-reply) that in the alternative the Court should construe “focused laser beam” to exclude a “broad field laser.” D.I. at 60. However, “[h]aving found the [“focused laser beam”] [clause] not indefinite, there is no further material dispute to be resolved by a construction.” *Align Tech., Inc. v. 3Shape A/S*, No. CV 18-1949-LPS, 2020 WL 7695927, at *10 (D. Del. Dec. 28, 2020); *see, e.g., SentiLock, LLC v. Carrier Fire & Sec. Americas LLC*, No. CV 20-520 (MN), 2024 WL 3328495, at *4 n.2 (D. Del. July 8, 2024).

III. CONCLUSION

The Court will construe the disputed claim terms as described above. The Court will issue an Order consistent with this Memorandum Opinion.