

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW MEXICO

DENTSPLY SIRONA INC., TULSA DENTAL
PRODUCTS LLC D/B/A DENTSPLY
SIRONA ENDODONTICS,

Plaintiffs,

vs.

EDGE ENDO, LLC, US ENDODONTICS,
LLC,

Defendants.

1:17CV1041-JFB-SCY

MEMORANDUM AND ORDER

This matter is before the Court on Edge Endos, LLC's, and US Endodontics, LLC's motion for Summary Judgment of Non-Infringement of U.S. Patent No. 9,801,696, [Doc. 311](#); Edge Endo, LLC's and US Endodontics, LLC's Motion for Summary Judgment of No Willful Infringement, [Doc. 312](#); Dentsply Sirona Inc.'s and Tulsa Dental Products LLC's motion for Partial Summary Judgment, [Doc. 313](#); and Dentsply Sirona Inc.'s and Tulsa Dental Products LLC's motion for Partial Summary Judgment that Certain Asserted Claims are Not Invalid, [Doc. 314](#).

BACKGROUND

Plaintiffs filed their second amended complaint for patent infringement, alleging infringement by defendants of United States Patent Nos. 8,932,056 ("the '056 patent"), 9,351,803 ("the '803 patent"), 8,882,504 ("the '504 patent"), and 9,801,696 ("the '696 patent") (collectively the "Asserted Patents" or the "Patents-in-Suit"). [Doc. 68](#). These patents allegedly cover revolutionary advances in the technology used in endodontic files.

This action arises under the patent laws of the United States, Title 35 of the United States Code.

On January 13, 2015, the United States Patent and Trademark Office issued United States Patent No. 8,932,056 entitled “Swaggering Endodontic Instruments” to inventor Michael Scianamblo. On May 31, 2016, the United States Patent and Trademark Office issued United States Patent No. 9,351,803 entitled “Endodontic Instruments with Offset Centers of Mass” to inventor Michael Scianamblo. On November 11, 2014, the United States Patent and Trademark Office issued United States Patent No. 8,882,504 entitled “Swaggering Endodontic Instruments” to inventor Michael Scianamblo. On October 31, 2017, the United States Patent and Trademark Office issued United States Patent No. 9,801,696 entitled “Instruments for Drilling Dental Root Canals” to inventors Gilbert Rota and Paul-Henri Vallotton. Dentsply Sirona has been selling its ProTaper Next endodontic files since January 2013. Thereafter, contend plaintiffs, defendants promoted a product known as Edge Taper Encore which is allegedly identical to plaintiffs’ ProTaper Next product.¹

The endodontic files at issue are very small instruments having diameters of less than 1 millimeter.

LAW

Summary Judgment Standards

The moving party has the initial burden of proving the absence of a genuinely disputed material fact relative to the claims in question. [*Celotex Corp. v. Catrett*, 477 U.S.](#)

¹ There are four patents-in-suit. Three of the patents-in-suit are issued to Dr. Michael Scianamblo (the “Scianamblo Patents-in-Suit”). Each of the Scianamblo Patents-in-Suit issued before this lawsuit was filed. The fourth patent-in-suit issued approximately two weeks after this lawsuit was filed and was asserted in an amended complaint filed shortly thereafter.

317, 330 (1986). The burden then shifts to the non-moving party to come forward with "specific facts showing that there is a genuine issue for trial." *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586-587 (1986); *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 252 (1986). "[I]f the issue is one of which the movant does not bear the burden of proof, and an adequate time for discovery has passed, summary judgment is warranted if the non-movant does not make a showing sufficient to establish the existence of each element essential to its cause of action." *Am. Mech.ce Sols., LLC v. Northland Process Piping, Inc.*, 184 F. Supp. 3d 1030, 1052 n.8 (D.N.M. 2016) (citing *Celotex Corp.*, 477 U.S. at 322-23).

Infringement/Non-Infringement

An infringer is one who "without authority makes, uses, offers to sell, or sells any patented invention, within the United States" 35 U.S.C. § 271(a). "An infringement analysis entails two steps. The first step is determining the meaning and scope of the patent claims asserted to be infringed The second step is comparing the properly construed claims to the device accused of infringing." *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995), aff'd 517 U.S. 370 (1996).

"One who does not infringe an independent claim cannot infringe a claim dependent on (and thus containing all the limitations of) that claim." *Monsanto Co. v. Syngenta Seeds, Inc.*, 503 F.3d 1352, 1359 (Fed. Cir. 2007) (quoting *Wahpeton Canvas Co., Inc. v. Frontier, Inc.*, 870 F.2d 1546, 1552 (Fed. Cir. 1989)) (affirming summary judgment of non-infringement). To establish literal infringement, "every limitation set forth in a claim must be found in an accused product, exactly." *Microsoft Corp.*, 817 F.3d at 1313 (citing *Southwell Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1575 (Fed. Cir.

1995)) (emphasis added); see also *TechSearch, L.L.C. v. Intel Corp.*, 286 F.3d 1360, 1371 (Fed. Cir. 2002). Under the doctrine of equivalents, "the accused product or process contain[s] elements identical or equivalent to each claimed element of the patented invention." *American Calcar, Inc. v. American Honda Motor Co., Inc.*, 651 F.3d 1318, 1338 (Fed. Cir. 2011) (quoting *Warner-Jenkinson Co., Inc. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 40 (1997)). Although a party asserting a claim under the doctrine of equivalents cannot assert a theory that "would entirely vitiate a particular claim element," i.e., where it renders a claim limitation inconsequential or ineffective. *Power Integrations, Inc. v. Fairchild Semiconductor Int'l*, 843 F.3d 1315, 1344 (Fed. Cir. 2016) (quoting *Lockheed Martin Corp. v. Space Systems/Loral Inc.*, 324 F.3d 1308, 1321 (Fed. Cir. 2003)).

The burden of proving infringement by a preponderance of the evidence falls on the patent owner. *Amgen Inc. v. Sandoz Inc.*, 923 F.3d 1023, 1027 (Fed. Cir. 2019). Even though a determination of infringement of the properly construed claims is a question of fact, "[s]ummary judgment of noninfringement is . . . appropriate where the patent owner's proof is deficient in meeting an essential part of the legal standard for infringement, because such failures will render all other facts immaterial." *TechSearch, L.L.C. v. Intel Corp.*, 286 F.3d 1360, 1369 (Fed. Cir. 2002) (citing *London v. Carson Pirie Scott & Co.*, 946 F.2d 1534, 1537 (Fed. Cir. 1991)). "[S]pecific claim limitations cannot be ignored as insignificant or immaterial in determining infringement." *TechSearch*, 286 F.3d at 1373-74 (internal citations omitted).

An infringement determination is a two-step analysis. *Terlep v. Brinkmann Corp.*, 418 F.3d 1379, 1381 (Fed. Cir. 2005). First, the court must construe the claims to determine their scope and meaning. *Markman v. Westview Instruments, Inc.*, 52 F.3d

967, 976 (Fed. Cir. 1995). This step, claim construction, is a question of law. *Wright Med. Tech., Inc. v. Osteonics Corp.*, 122 F.3d 1440, 1443 (Fed. Cir. 1997). Second, the claim as properly construed must be compared to the accused product. See *Markman*, 52 F.3d at 976. This second step is a question of fact. *Wright Med.*, 122 F.3d at 1443. "To prove infringement, the patentee must show that the accused device meets each claim limitation, either literally or under the doctrine of equivalents." *Dynacore Holdings Corp. v. U.S. Philips Corp.*, 363 F.3d 1263, 1273 (Fed. Cir. 2004).

DISCUSSION

A. *Edge Endo, LLC, US Endodontics, LLC motion for Summary Judgment of Non-Infringement of U.S. Patent No. 9,801,696, Doc. 311*

Defendants and Counterclaim-Plaintiffs Edge Endo, LLC ("Edge Endo") and US Endodontics, LLC ("US Endo") (hereinafter "defendants") contend that the Court should find non-infringement of U.S. Patent No. 9,801,696 ("the '696 patent"). Plaintiffs contend that Edge's EdgeTaper Encore X1 endodontic file infringes claims 1, 2, 5, and 8-10 ("the Asserted Claims") of the '696 patent either literally or under the doctrine of equivalents. Defendants argue that the Edge Taper Encore X1 file does not literally infringe any of the asserted claims. Further, defendants argue that the plaintiffs' argument under the doctrine of equivalents fails as it vitiates a vital limitation of claim 1 of the '696 patent.

The '696 patent relates to an instrument for drilling dental root canals. *Doc. 311-5*, Ex. 3, '696 patent, 2:15-16. According to the '696 patent specification, the "first portion" of the endodontic instrument extends "from the point 3 towards the rear of the active part 1b and of which the centre of mass is located on the axis of rotation R of the instrument." *Id.*, Ex. 3, 3:14-16 (emphasis added). "Thus, the first portion 1c and in particular the point 3 are centred with respect to the axis of rotation R of the instrument." *Id.* Ex. 3, 3:31-33. During prosecution of the application that resulted in the '696 patent, the applicants stated

that "[a]ny cross-section, e.g., 4a of the first portion 1c has a center of mass m_a located on the axis of rotation R." [Doc. 311-6](#), Ex. 4, Nov. 14, 2016 Response to Office Action, p. 4. The applicants also argued that the prior art did not "disclose or suggest that any cross-section of a first portion has a center of mass located on the axis of rotation." *Id.* at p. 7.

Claim 1 is the sole independent claim of the '696 patent. [Doc. 311-5](#), Ex. 3, 8:1-9:13.² There are apparently five tip sizes. The only one that plaintiff accuses defendants of infringing is the '696 patent.

With regard to literal infringement, the parties and their experts argue at great length regarding the center of mass and the axis of rotation. In order to prevail on its claim of literal infringement, Dentsply must prove that every cross-section in the "first portion" of the EdgeTaper Encore X1 has its center of mass coinciding with the axis of rotation. See, e.g., [Microsoft Corp.](#), 817 F.3d at 1313; [Leviton Mfg. Co., Inc. v. Nicor, Inc.](#), 557 F. Supp. 2d 1231, 1244 (D.N.M. 2007). The shape of the cross-section, argues defendants, is untethered to the center of mass.

Defendants argue that there is no genuine dispute of material fact that the Edge Taper Encore X1file lacks the limitation of claim 1 of the '696 patent, the sole independent

² An instrument for drilling dental root canals comprising:
a tapered rod defined by a single continuous taper function and having over at least an active part of its length a polygonal cross-section forming at least two cutting edges, said active part terminating by a point and being defined by an envelope of a cylindrical or conical shape along its entire length, the longitudinal axis of the envelope coinciding with the axis of rotation of the instrument, wherein for any cross-section of the active part, at least one of the at least two cutting edges is located on the envelope, said active part has a first portion extending from the point and a second portion extending following the first portion towards the rear of the active part, any cross-section of the first portion has a center of mass located on the axis of rotation, said at least two cutting edges defined by said cross-section of the first portion being located on the envelope, at least one cross-section of the second portion has a center of mass offset with respect to the axis of rotation, at least one cutting edge defined by said cross-section of the second portion being located set back within the envelope. [Doc. 311](#), Ex. 3, claim 1.

claim, requiring that "any cross-section of the first portion [of the active part of the instrument] has a center of mass located on the axis of rotation." [Doc. 311-1, at 23](#).

With regard to the doctrine of equivalents, defendants ask the Court to find as a matter of law that this claim cannot stand. They make this assertion arguing that "this theory should be rejected under the principle of claim vitiation, as it would entirely vitiate a vital element of the sole independent claim of the '696 patent. If the doctrine of equivalents encompasses the EdgeTaper Encore X1 file, which has centers of mass that are offset from the axis of rotation in the "first portion," that would vitiate the element in claim 1 requiring that all cross-sections have centers of mass located on the axis of rotation." [Doc. 311-1 at 26](#). "Under claim vitiation, 'if a court determines that a finding of infringement under the doctrine of equivalents would entirely vitiate a particular claimed element, then the court should rule that there is no infringement under the doctrine of equivalents.'" [Power Integrations Inc., 843 F.3d at 1344](#) (quoting [Lockheed Martin Corp., 324 F.3d at 1321](#)); [Akzo Nobel Coatings, Inc. v. Dow Chem., 811 F.3d 1334, 1341-43 \(Fed. Cir. 2016\)](#). To allow the plaintiff to argue otherwise, contends defendants, violates the Supreme Court holding where the Court stated:

"The Supreme Court emphasizes that the doctrine of equivalents must not expand to eliminate a claim element entirely Here, the patents contain a distinct limitation, which was part of the bargain when the patent issued. This court cannot overlook that limitation or expand the doctrine of equivalents beyond its purpose to allow recapture of subject matter excluded by a deliberate and foreseeable claim drafting decision."

[Planet Bingo, LLC v. GameTech Int'l, Inc., 472 F.3d 1338, 1344-45 \(Fed. Cir. 2006\)](#) (citing [Warner-Jenkinson, 520 U.S. at 29](#)); see also [Sage Products, Inc. v. Devon Indus., Inc., 126 F.3d 1420, 1424-25 \(Fed. Cir. 1997\)](#) ("[F]or a patentee who has claimed an invention narrowly, there may not be infringement under the doctrine of equivalents in many cases,

even though the patentee might have been able to claim more broadly. If it were otherwise, then claims would be reduced to functional abstracts, devoid of meaningful structural limitations on which the public could rely.").

Plaintiff argues there is no evidence upon which this Court could grant defendants' motion for summary judgment on non-infringement. Plaintiff also argues that there is ample evidence of infringement, based on the expert opinion of Dr. David Sonntag, the admissions of defendants' founder and C.E.O, photographs of physical samples, all of which would allow a jury to find literal infringement. Further, plaintiff contends that there is sufficient testimony from John Ferone that the Edge Taper Encore is functionally equivalent to Pro Taper Next. Further, plaintiff contends that defendants have refused to produce design and manufacturing documents for the Accused Products.

Plaintiff argues that there is substantial evidence that would permit a jury to determine that EdgeTaper Encore X1 has a first portion that is centered on the axis of rotation, and that it therefore literally infringes the claims of the '696 Patent, or in the alternative, to find infringement under the doctrine of equivalents. Dr. Goodis, defendants' expert, admitted that the Accused Products have square-shaped cross-sections near the tip of the instruments, and also that the offset of the instruments is obtained by grinding one side deeper than the other sides. There is also significant disagreement as to the size of the measured deviations from the axis of rotation. Plaintiff contends that it is up to the jury to determine how close is close enough. In [*Rosby Corp. v. Stoughton Trailers, Inc.*, No. 95-0511, 2003 WL 22232802 *3 \(N.D. Ill. Sept. 26, 2003\)](#) ("a reasonable juror could draw a reasonable and justifiable inference that in practice, due to human error, tooling, or use, trailers are in use that have side panels that are actually touching."); [*Apple Inc. v. Motorola, Inc.*, No. 11-8540, 2012 WL 13046385 \(N.D. Ill. Jan. 17, 2012\)](#)

("[i]nfringement is a question of fact, and whether 33.7 degrees is close enough to 27 degrees [i.e., a tolerance for vertical scrolling described in Apple's patent] to infringe Apple's patent, in light of evidence that a small difference in angle affects performance substantially, is a disputed question that cannot be resolved on summary judgment." *Id.* at *5).

With regard to the doctrine of equivalents, plaintiff contends that a jury could reasonably conclude that a portion near the tip of the Edge Taper Encore X1 is supposed to be centered and it infringes under the doctrine of equivalents because any many deviations are insubstantial and do not materially affect performance. See *London v. Carson Pirie Scott & Co.*, 946 F.2d 1534, 1538 (Fed. Cir. 1991) ("[T]he patentee should not be deprived of the benefits of his patent by competitors who appropriate the essence of an invention while barely avoiding the literal language of the claims...[a]ccordingly, the doctrine of equivalents emerged."); see also *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 731–32 (2002) ("The language in the patent claims may not capture every nuance of the invention or describe with complete precision the range of its novelty. If patents were always interpreted by their literal terms, their value would be greatly diminished. Unimportant and insubstantial substitutes for certain elements could defeat the patent, and its value to inventors could be destroyed by simple acts of copying."). How close is enough is a jury question, contends plaintiff.

The Court agrees with the plaintiff and will deny defendant's motion for summary judgment as to Patent No. '696. There are clearly material facts, as outlined herein, as to both the issues of infringement and the doctrine of equivalents. The plaintiffs have met their burden of showing that there exist disputed material facts relative to the claims in question.

B. *Edge Endo, LLC, US Endodontics, LLC. Motion for Summary Judgment of No Willful Infringement, Doc. 312*

To establish willful infringement, a plaintiff must demonstrate that the defendant had pre-suit knowledge of the asserted patents. *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1341 (Fed. Cir. 2016). Awards of enhanced damages due to willful infringement are “generally reserved for egregious cases of culpable behavior,” for example, “the ‘wanton and malicious pirate’ who intentionally infringes another’s patent – with no doubts about its validity or any notion of a defense [.]” *Halo Elecs., Inc. v. Pulse Elecs. Inc.*, 136 S. Ct. 1923, 1932 (2016). See e.g., *Gustafson, Inc. v. Intersystems Indus. Prod., Inc.*, 897 F.2d 508, 511 (Fed. Cir. 1990) (“[A] party cannot be found to have ‘willfully’ infringed a patent of which the party had no knowledge.”); *State Industries, Inc. v. A.O. Smith Corp.*, 751 F.2d 1226, 1236 (Fed. Cir. 1985) (“To willfully infringe a patent, the patent must exist and one must have knowledge of it.” (emphasis in original)). The Federal Circuit has held that “[k]nowledge of the patent alleged to be willfully infringed continues to be a prerequisite to enhanced damages” after *Halo*. *WBIP*, 829 F.3d at 1341; see also, *SRI Intl., Inc. v. Cisco Sys., Inc.*, 930 F.3d 1295, 1309 (Fed. Cir. 2019).

Damages may be enhanced up to three times in cases where the defendant has willfully infringed the patents-in-suit. 35 U.S.C. § 284. The inquiry is whether the defendant “acted despite a risk of infringement that was either known or so obvious that it should have been known.” *WCM Indus., Inc. v. IPS Corp.*, 721 F. App’x 959, 970 (Fed. Cir. 2018); *Arctic Cat Inc. v. Bombardier Recreational Prod. Inc.*, 876 F.3d 1350, 1371 (Fed. Cir. 2017).

Defendants argue that to the extent Dentsply’s claim of willful infringement is premised on Edge’s post-filing conduct, such a claim is legally deficient. See *Mentor Graphics Corp. v. EVE-USA, Inc.*, 851 F.3d 1275, 1295 (Fed. Cir. 2017) (“[I]n ordinary

circumstances, willfulness will depend on an infringer's prelitigation conduct' because 'a patentee must have a good faith basis for alleging willful infringement.'" (quotation omitted). Willfulness is measured "against the knowledge of the actor at the time of the challenged conduct." *Halo*, 136 S. Ct. at 1933; see also, *Greatbatch Ltd. v. AVX Corp.*, No. 13-cv-723-LPS, 2016 WL 7217625, at *3 (D. Del. Dec. 13, 2016) ("The key inquiry in this case is whether there is evidence in addition to [defendants]' pre-suit knowledge of the patents that could show that" the infringement was willful.

Defendants file this motion for summary judgment contending there is no evidence that they had any knowledge of any patents-in-suit prior to the filing of this lawsuit. Further, defendants argue that plaintiff did not mark its ProTaper Next product with any of the patents'-in-suit until December 18, 2017. See Doc. 312-13, testimony of Ammons, Ex. 11 at 176:15-176:24, 179:2-180:1. Likewise, plaintiff did not advertise the same, assert defendants, and plaintiff is not seeking pre-suit damages in this case. Plaintiff did file a trademark infringement suit for the use of "Edge Taper Next." Thereafter, defendants changed the name to "Edge Taper Encore" and the lawsuit was dismissed on May 15, 2017. Further, even if there was a mark on the related patents, this does not confer knowledge on defendants as to this patent, they argue. See e.g., *Finjan, Inc. v. Juniper Networks, Inc.*, No. 17-cv-05659 WHA, 2018 WL 905909, at *3 (N.D. Cal. Feb. 14, 2018) (knowledge of related patent does not create knowledge of the patent-in-suit).

Plaintiff argues there is ample evidence to support a finding of willfulness. Plaintiff contends there is ample evidence that defendants had actual knowledge of the patents in suit prior to this lawsuit. First, there is evidence of the three patents-in-suit that existed before this lawsuit was filed. Second, there is evidence that would enable the jury to find that defendants willfully blinded themselves to their infringement. In particular,

defendants' CEO, Dr. Charles Goodis, stated in February 16 that he "spent a couple years just digesting all the patents out there ... [o]n endo files." [Doc. 327-11](#), Ex. J at DSI0156636; and he allegedly told customers that the ProTaper Next and the Accused Products are "so alike"; placed the words "ProTaper Next" beside the name of the Accused Products, [Doc. 327-7](#), Ex. F at USENDO00001969 (referring to "Encore (ProTaper Next)"); [Doc. 327-8](#), Ex. G at EDGE00008851 (referring to "X files(Pr*taper N*ext)"); and Dr. Sonntag tested and concluded that the Accused Products have "nearly identical" geometries to the ProTaper Next. [Doc. 327-9](#), Ex. H ¶ 48. Plaintiff argues it advertised that the ProTaper Next has a "patented design." [Doc. 298-14 at DSI0019890](#). Defendants copied advertising claims for the Accused Product for ProTaper Next. [Doc. 298-13](#) (email from Edge Endo's Marketing Coordinator) at K2MD00000769. Goodis also rejected some advertising, asking for no trigger words such as "asymmetrical axis." [Doc. 298-17](#) (email transmitting Dr. Goodis's instruction); see also [Doc. 298-16](#) (rejected advertisement). The defendants allegedly failed to do due diligence regarding the Scianamblo patents-in-suit during a large sale of 50.1% of the company.

Dr. Goodis testified that he did not look at the ProTaper Next packaging to see if it was marked with patents; did not ask anyone to check on the same; did not perform any searches for patents that might cover ProTaper Next; and cannot remember if he asked anyone to do the same. He testified that no one is responsible for reviewing the patents of competitors. Further, defendants have continued to sell the Accused Products during the pendency of this litigation and have increased promotion efforts. Nor did defendants ask for an opinion from counsel until 18 months after the filing of the lawsuit.

As for the issue of willful blindness, the Supreme Court has explained, "defendants cannot escape [liability] by deliberately shielding themselves from clear evidence of

critical facts that are strongly suggested by the circumstances. The traditional rationale for this doctrine is that defendants who behave in this manner are just as culpable as those who have actual knowledge.” *Global-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754, 766 (2011). “[P]ersons who know enough to blind themselves to direct proof of critical facts in effect have actual knowledge of those facts.” *Id.* Some district courts have determined that this doctrine extends to willful patent infringement.³

The Court finds there are sufficient material facts at issue to allow this claim to go to trial. The parties clearly disagree on the evidence and the meaning of the evidence. As discussed herein, there are clearly material facts at issue in this regard. When did the defendants know or when should they have known? Was defendant willfully blind to the patents-in-suit prior to the filing of the lawsuit? Did defendants continue to willfully infringe during the pendency of the lawsuit? These are all questions of material fact. The Court cannot ascertain who knew what when. There is too much conflicting evidence. The Court must look at the totality of the circumstances as the evidence is presented in Court. The Court will allow this issue to continue to trial. Based on the evidence presented, the Court and the parties can reconsider this issue if necessary.

C. *Dentsply Sirona Inc., Tulsa Dental Products LLC motion for Partial Summary Judgment, Doc. 313*

Plaintiffs move for partial summary judgment requesting that the Court find that (1) defendants have waived their claim construction argument that the shank must attach directly to the motor, and that defendants’ technical expert has admitted that there

³ See, e.g., *Motiva Patents, LLC v. Sony Corp.*, 408 F.Supp. 3d 819, 838 (E.D. Tex. 2019); *Bos. Sci. Corp. v. Nevro Corp.*, 415 F. Supp. 3d 482, 495 (D. Del. 2019); *WCMIndus., Inc. v. IPS Corp.*, 2016 WL 2771790, at *1 (W.D. Tenn. 2016), *aff’d in part, vacated in part*, 721 F. App’x 959 (Fed. Cir. 2018)); *Script Sec. Sols. LLC v. Amazon.com, Inc.*, 170 F. Supp. 3d 928 (E.D. Tex. 2016); *Corephotonics, Ltd. v. Apple, Inc.*, No. 17-6457, 2018 WL 4772340, *9-10 (N.D. Cal. 2018); *Ansell Healthcare Prods. LLC v. Reckitt Benckiser LLC*, No. 15-915, 2018 WL 620968, *6-8 (D. Del. 2018).

is no support in the patent specifications for reading in that limitation; and (2) under this Court's claim construction order, the asserted claims of the Scianamblo patents do not require a cutting tip. The three claims in question include: (i) claim 6 of the '504 Patent, (ii) claim 17 of the '056 Patent, and (iii) claim 20 of the '803 Patent. Plaintiff states that the Court's granting of this motion as well Plaintiffs' motion for partial summary judgment of validity would resolve all issues of infringement and validity.

Plaintiffs first argue that defendants' first argument proposes a new claim construction, one that was not previously raised. Defendants want to read the word "directly" into the claim element: "a shank configured for attachment to a motor." [Doc. 313-2](#)—3, Ex. 1,2 March 5, 2020 Gary Garman Dep. Tr. at 185:24-186:9.⁴ Plaintiffs contend this is not within the claim construction schedule and it is also contrary to the plain language of the claims and the patent specification. Defendants' own technical expert, Mr. Garman, admitted in his deposition that "[t]here was nothing in [the patent specification] that would support" defendants' newly proposed construction in which he reads the word directly into the claim. *Id.* at 186:15-187:10. Plaintiffs argue they have waived this argument. See [VIA Techs., Inc. v. ASUS Comput. Int'l, No. 14-03586, 2016 WL 9724836, at *1 \(N.D. Cal. Aug. 19, 2016\)](#) (finding a party had waived construction of

⁴ Mr. Garman admitted during his deposition that this noninfringement argument requires that the word "directly" be read into the claim.

Q: Does the word "directly" appear in the claim?

A: In the claim, no.

Q: So that's a requirement you read in here?

A: That would be my understanding.

[Doc. 313-2, Ex. 1 at 186:4-9.](#)

Q: Right. So the specification is teaching that you have a shank and you have a fitting attached to the shank and the fitting goes into the handpiece with the motor, correct?

A: Apparently.

[Id. at 189:21-25.](#)

terms that were not timely submitted because to hold otherwise would render the claim construction process meaningless).

Plaintiffs next argue that the repackaging of its indefiniteness argument with respect to the “body” limitation in the Scianamblo patents has already been rejected by this Court in its August 29, 2019 Claim Construction Order. Defendants want the claims to require a cutting tip. However, this was not required under the claim construction order and plaintiff argues that the tip can be non-cutting. For these reasons, plaintiffs urge that these claims fail as a matter of fact and law. See, e.g., *IGT v. Bally Gaming Int'l, Inc.*, 659 F.3d 1109, 1121 (Fed. Cir. 2011); *Hologic, Inc. v. Minerva Surgical, Inc.*, 325 F. Supp. 3d 507, 531-32 (D. Del. 2018) (Bataillon, J.).

Defendants contend that there are issues of material fact regarding infringement of these claims. Defendants argue that plaintiffs misstate and mischaracterize their non-infringement positions and gloss over disputes of material facts.⁵ Defendants contend that Garman based his opinions on the claim constructions determined by this Court. Garman’s CAD model analysis talks about some transverse cross-sections being circular and some are rectangular. This, urges defendants, supports Garman’s opinion that the Edge Taper Encore files do not infringe any claims of the Scianamble patents. See [Doc. 326-7](#), ¶¶ 82-86. Defendants also contend they do not require a cutting tip, as argued by plaintiffs. Defendants also argue that the Scianamblo patents have “polygonal shape” or “multiple sides,” and this fact at least creates a material fact for trial as to whether

⁵ Defendants have conceded the following: “While Edge maintains that it has a legitimate non-infringement argument regarding the claim term “a shank configured for attachment to a motor,” in light of the strength of its other non-infringement and invalidity positions, and in an effort to streamline the issues for trial, Edge will not assert a non-infringement position regarding this claim limitation at trial.” [Doc. 326 at 4, f.n.1.](#)

EdgeTaper Encore files infringe these claims. Defendants contend that the testimony of Garman and the CAD drawings are sufficient evidence to submit to the jury.

With regard to the argument about the term “directly,” the Court agrees that Mr. Garman testified that he read in this requirement. [Doc. 326-8](#), Ex. 7 at 185:24-186:9. He also agreed there is nothing in the ‘504 patent that supports the construction of directly. *Id.* at 186:10-187:10. With regard to the cutting tip argument espoused by defendants, both defendants’ EdgeTaper Encore and plaintiffs’ ProTaper Next have noncutting tips. The tip is 1-3 millimeters. In its Claim Construction Order, this Court adopted plaintiffs’ proposed construction for the Body Limitation. [Doc. 237 at 10](#). In adopting this construction, the Court stated that “the patent itself distinguishes between the tip and shank themselves as well as the ends of the body adjacent to the tip and shank.” *Id.* See also [Douglas Dynamics, LLC v. Buyers Prod. Co.](#), 717 F.3d 1336, 1342–43 (Fed. Cir. 2013) (directing the entry of summary judgment of infringement because “[t]he ordinary meaning of ‘connected to’ encompasses indirect linkages.”) *Id.* at 1342.

The Court agrees that defendants have failed to provide any evidence that this term should be construed in a manner that is contrary to its ordinary meaning, or contrary to the patent specifications; or would exclude endodontic files from the scope of the Scianamble Patents. The Court finds there is no evidence to support defendants’ argument regarding the cutting tip. Accordingly, the Court will grant plaintiffs’ motion for summary judgment that the Edge Taper Encore infringes (a) claims 1-4 and 6 of the ‘504 Patent, (b) claims 3, 8, and 17 of the ‘056 Patent, and (c) claims 4-6 and 20-21 of the ‘803 Patent. Further, the Court agrees with the plaintiffs that the purpose of a summary judgment motion or response is not to try to create a new claim construction. The Court agrees that defendants want it to allow the jury to make the claim constructions with

regard to the claims as requiring the body (which has polygonal cross-sections and cutting edges) to include the tip (which is circular and does not have cutting edges).⁶ This claim construction is the role of the Court, however. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996) (“[T]he construction of a patent, including terms of art within its claim, is exclusively within the province of the court.”). The Court has already determined the meaning of these claims in plaintiffs’ favor. The supporting evidence offered by Garman that he proposes to offer to the jury simply undermines the previous claim construction.

D. *Dentsply Sirona Inc., Tulsa Dental Products LLC motion for Partial Summary Judgment That Certain Asserted Claims are Not Invalid, Doc. 314*

“Plaintiffs seek an order from this Court that (1) claims 6, 10, and 11 of U.S. Pat. No. 8,882,504 (the “’504 Patent”), claims 10, 11, and 17 of U.S. Pat. No. 8,932,056 (the “’056 Patent”), claims 13, 14, and 20 of U.S. Pat. No. 9,351,803 (the “’803 Patent”)1, and claim 9 of U.S. Pat. No. 9,801,696 (the “’696 Patent”) are not invalid; (2) claims 1-2, 5, and 8-10 of the ’696 Patent are not invalid over Scianamblo ’669; and (3) the asserted claims of the ’504 Patent are not invalid over McSpadden ’186, Rouiller, or Badoz ’279 references.” [Doc. 314 at 5](#). Plaintiffs also seek summary judgment of infringement and a finding that defendants’ EdgeTaper Encore infringes: (a) claims 1-4 and 6 of the ’504 Patent; (b) claims 3, 8, and 17 of the ’056 Patent; and (c) claims 4-6 and 20-21 of the ’803 Patent. Resolution of these issues in favor of the plaintiffs, they contend, will resolve all issues of infringement and validity.

⁶ O. Garman opined that based on the disclosures in the Scianamblo patents, “the fact-finder may interpret ‘end adjacent to the tip’ to mean adjacent to the ‘distal-most transverse cross-section of the instrument’ as opposed to ‘the distal most transverse cross-section of the instrument that has cutting edges.’”

[Doc. 326 at 4-5 \(¶ O\) \(emphasis added\)](#).

With regard to a finding of no invalidity, the Court would find that defendants' defenses are legally deficient and that reasonable jurors could not find invalidity by clear and convincing evidence. Plaintiffs first argue that this is an obviousness issue. Garman admits in his expert report that he relies on speculative technical modifications that have not ever been attempted in relation to endodontic files. However, Garman offers no evidence of this invalidity defense, and he relies solely on the '445 to supply the missing features. He makes no showing that his combinations would be operable to produce an offset file or that a person of ordinary skill in the art ("POSITA") would have any reasonable expectation of success in making such a combination.⁷ In addition, defendants offer no motivation as to why a person would combine these prior art teachings to arrive at the claimed invention. See *MediaTek, Inc. v. Freescale Semiconductor, Inc.*, 2014 WL 2854705, at *2 (N.D. Cal. 2014). Further, Garman admits he has not mapped out how this would be done, not suggested to defendants that they try and do it, and he has not personally ever made these modifications. In addition, none of the references Garman relies on, according to Dr. Sonntag, explain how this method could be used to produce a file that is offset from the axis of rotation and has edges out of contact with the canal wall.

Second, plaintiffs contend that defendants' assertion that the claims of the '696 Patent are invalid as obvious over a single reference: U.S. Patent Application Pub. No.

⁷ Q: Now, I'd like you to tell me whether there's anything in your report explaining how this process that you describe as straightforward could be modified to produce an instrument with edges out of contact with the canal wall and the center of mass path that spirals around the axis of rotation.

A: I didn't go into detail in describing that.

Q: In fact, you didn't provide any detail in describing it, correct?

A: Correct.

Doc. 314-8, Ex. 7 at 206:22-207:7 (emphasis added); see also id. at 208:1-5 ("Q. You provided no details of any kind as to how one would implement this process, nada, bupkus, nothing, correct? A. I provided no details.")

2006/0228669 (“Scianamblo ‘669”). Plaintiffs contend that this is insufficient under the law, as there must be a reason or motivation in order to combine various concepts or teachings into a single instrument which includes each and every element claimed by the asserted ‘696 Patent claims. *SIBIA Neurosciences, Inc. v. Cadus Pharm. Corp.*, 225 F.3d 1349, 1356 (Fed. Cir. 2000); see also *In re Stepan Co.*, 868 F.3d at 1346 n.1 (Fed. Cir. 2017) (“Whether a rejection is based on combining disclosures from multiple references, combining multiple embodiments from a single reference, or selecting from large lists of elements in a single reference, there must be a motivation to make the combination and a reasonable expectation that such a combination would be successful.”). The claim by defendants as to the Scianamblo ‘669, is legally insufficient, argues plaintiffs, and fails as a matter of law.

Third, defendants contend the invalidity expert report shows or discloses a swagger in the Scianamblo Patents.⁸ However, plaintiffs argue this is an exacting standard under the law, and this does not exist under the inherency doctrine. Thus, plaintiffs ask the Court to find they are entitled to partial summary judgment on this claim, finding that the asserted claims of the Patents-in-Suit are not invalid.

The defendants contend that all three of these arguments are without merit, as there are material facts at issue that must be submitted to the jury. They also argue, again, that each of the asserted claims are invalid. Defendants contend that the prior art references teach the requirements of the claims at issue, for example, with Garman ‘455 teaching the process for manufacturing an endodontic instrument with certain

⁸ In Paragraph 174 of the Garman Invalidity Report, Mr. Garman states that: “It would have been straightforward for a person of ordinary skill in the art to start with Garman ‘445’s disclosed grinding steps to obtain a gradually changing cross-sectional geometry and follow that with a twisting step to form the cutting edges and arrive at the invention recited in claims 6, 10, and 11 of the ‘504 patent.” *Doc. 314-7, Ex. 6 ¶ 174*; see also *id.* at ¶¶ 221, 260, and 297.

specifications. Showing that the prior art reference is enabling is a burden placed on plaintiffs. *Cubist Pharm., Inc. v. Hospira, Inc.*, 75 F. Supp. 3d 641, 660-661, n.10 (D. Del. 2014). Further, defendants contend that they do not contend that these dependent claims are anticipated by the published prior art under 35 U.S.C. § 102, but rather they are obvious over the prior art under 35 U.S.C. § 103. Defendants also state that they do not argue that the process used in the Garman '445 necessarily results in a centered instrument, as Garman says it can be offset depending on how one twists the instrument.

Defendants also rely on the Federal Circuit language stating:

"[T]he record in this case supports the trial court's findings. While this court indeed warns against employing hindsight, its counsel is just that—a warning. That warning does not provide a rule of law that an express, written motivation to combine must appear in prior art references before a finding of obviousness. Stated differently, this court has consistently stated that a court or examiner may find a motivation to combine prior art references in the nature of the problem to be solved. This form of motivation to combine evidence is particularly relevant with simpler mechanical technologies.

This record shows that the district court did not use hindsight in its obviousness analysis, but properly found a motivation to combine because the two references address precisely the same problem of underpinning existing structural foundations."

Ruiz v. A.B. Chance Co., 357 F.3d 1270, 1276-77 (Fed. Cir. 2004).

Defendants rely in large measure on their claim of obviousness. The modifications of embodiments, they argue, would be obvious to a POSITA to implement and create the claimed inventions. Defendants contend they have offered clear and convincing evidence of the same.

Finally, defendants contend that a jury could reasonably find that the teachings in the Scianamblo patents support that swaggering is an inherent characteristic of files with the offset designs described in the prior art.

Issued patents are presumed valid, and defendants, as previously discussed herein must prove invalidity by clear and convincing evidence. [35 U.S.C. § 282](#); [Microsoft Corp. v. I4I Ltd. P'ship](#), 564 U.S. 91, 95 (2011). Obviousness is a question of law, which depends on underlying factual inquiries. [Graham v. John Deere Co. of Kan. City](#), 383 U.S. 1, 17 (1966); [Rolls-Royce, PLC v. United Techs. Corp.](#), 603 F.3d 1325, 1338 (Fed. Cir. 2010). Under [35 U.S.C. § 103](#), defendants must establish by clear and convincing evidence that “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” *Id.* A patent may not be found invalid as obvious unless the party challenging the validity of the patent has provided evidence showing that: (1) “a skilled artisan would have had reason to combine the teaching of prior art references to achieve the claimed invention, and” (2) “that the skilled artisan would have had a reasonable expectation of success from doing so.” [PAR Pharm., Inc. v. TWI Pharms., Inc.](#), 773 F.3d 1186, 1193 (Fed. Cir. 2014)

The Court agrees that defendants cannot show clear and convincing evidence that the claims of the '696 patent are invalid over Scianamblo '669. The evidence regarding combining these multiple designs into a single instrument is not sufficiently explained or argued or supported by the defendants. Defendants reasons for its combination are nonexistent. “Hindsight reconstruction” is insufficient. [In re Fine](#), 837 F.2d 1071, 1075 (Fed. Cir. 1988) (“One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.”). There is no showing that a POSITA would have been motivated by the combined teachings to achieve the claimed invention. [STX, LLC v. Epoch Lacrosse, LLC](#), No. 14-3511, 2015 WL

8606418, at *12 (D. Md. Dec. 14, 2015) (“Obviousness asks whether an ordinary person skilled in the art ‘would have been motivated to’ combine prior art to make the invention at issue. This inquiry does not ask simply whether the skilled artisan could combine these references.”)

In addition, plaintiffs contend that defendants cannot show by clear and convincing evidence that the ‘504 Patent claims are invalid over the prior art publications because those publications do not have swagger, nor have the defendants met their burden for proving that there is a limitation under the doctrine of inherency. This Court has already construed the term “swagger” to mean a “wave-like motion.” See [Doc. 279, at 1-3](#). The defendants do not set forth any references that show the instruments will swagger or move in a wave-like manner. This limitation is not taught in the prior art or at least not cited by the defendants. [Advanced Display Sys., Inc. v. Kent State Univ.](#), 212 F.3d 1272, 1282 (Fed. Cir. 2000) (“[I]nvalidity by anticipation requires that the four corners of a single, prior art document describe every element of the claimed invention, either expressly or inherently”). Inherency requires that “the limitation at issue necessarily must be present, or the natural result of the combination of elements explicitly disclosed by the prior art.” [PAR Pharm., Inc.](#), 773 F.3d at 1196. It “may not be established by probabilities or possibilities.” *Id.* at 1195 (quoting [In re Oelrich](#), 666 F.2d 578, 581 (CCPA 1981)). Defendants make a presumption in this regard, but it is not supported by the evidence, and no assertions say it “will” swagger. See [Doc. 314-2](#), Ex. 1 at 20:32-38, *id.* at 46 (will tend to swagger). *Id.* at 29:33-35 (“can swagger”), *id.* at 51, and *id.* at 28:61-67, *id.* at 50 (“same principles can be used to predict the swagger, or bending and resultant deflections”, describing analytical tools).

The Court agrees that defendants have failed to show how their combinations as proposed with Garman '445 would create an endodontic instrument. It is speculative at best. The same is true as to the '696 Patent's claimed instrument. Further, defendants failed to carry their burden of showing that Instruments of McSpadden '186, Rouiller, and Badoz '279 inherently swagger. With regard to the obviousness defense, defendants have failed to show "how [its] references could be combined" and how its "combination would operate or read on the asserted claims." [ActiveVideo Networks, Inc. v. Verizon Commc'ns, Inc.](#), 694 F.3d 1312, 1327 (Fed. Cir. 2012). Summary judgment is appropriate where the defendants fail to provide this explanation. *Id.*; See *supra*, f.n. 7, "I provided no details" Garman agreed. Defendants argue it could be done, but they do not say how. It stretches credulity to say that such a process was obvious. Accordingly, the Court will grant plaintiffs' motion for partial summary judgment.

THEREFORE, IT IS ORDERED THAT:

1. Defendants' motion for summary judgment, [Doc. 311](#), is denied;
2. Defendants' motion for summary judgment, [Doc. 312](#), is denied;
3. The plaintiffs' motion for summary judgment, [Doc. 313](#), is granted as to the term "a shank configured for attachment to a motor," and defendants will not assert a non-infringement defense as to that claim element. The Court likewise grants plaintiffs' remaining claims for summary judgment in [Doc. 313](#).
4. Plaintiffs' motion for summary judgment, [Doc. 314](#), is granted. The Court (1) grants plaintiffs' motion for summary judgment that claims 6, 10, and 11 of the '504 Patent, claims 10, 11, and 17 of the '056 Patent, and claims 13, 14, and 20 of the '803 Patent are not invalid; (2) grants plaintiffs' motion for summary judgment that claims 1-2, 5, and 8-10 of the '696 Patent are not invalid over

Scianamblo '669; and (3) grants plaintiffs' motion for summary judgment that the asserted claims of the '504 Patent are not invalid over McSpadden '186, Rouiller, or Badoz '279.

Dated this 23rd day of June 2020.

BY THE COURT:

s/ Joseph F. Bataillon
Senior United States District Judge