

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

EUGENE DANESHVAR,

Plaintiff,

Case No. 2:13-cv-13096

v.

HONORABLE STEPHEN J. MURPHY, III

DARYL KIPKE and NEURONEXUS
TECHNOLOGIES, INC.,

Defendants.

**OPINION AND ORDER GRANTING IN PART AND DENYING
IN PART DEFENDANTS' MOTION FOR SUMMARY JUDGMENT [134]**

The case concerns a dispute between a former student at the University of Michigan and his faculty advisor. Plaintiff Eugene Daneshvar alleges that Defendant Daryl Kipke stole and patented Daneshvar's idea for a device used to facilitate deep brain stimulation. Neuronexus Technologies—a company founded by Kipke that researches and patents medical devices—is a co-defendant. Daneshvar brought an action for correction of inventorship and also raised three tort claims: fraud, breach of fiduciary duty, and unjust enrichment. Defendants raised a counterclaim seeking a declaratory judgment that Daneshvar is not an inventor of the disputed patent, and Kipke raised a counterclaim for defamation. Mediation was attempted and failed and Defendants now move for summary judgment. The Court will grant the motion in part and deny it in part.

BACKGROUND

I. Intellectual Property at the University of Michigan

Significant amounts of intellectual property are created at the University of Michigan and the various colleges within it. Accordingly, the University has a host of rules, policies, and institutions to determine ownership of the property and facilitate its transfer. The Board

of Regents governs the University as a whole and sets its rules and policies. ECF 134-2, ¶¶ 5–6, 8. The Regents adopted or approved two documents relevant to the case: the Bylaws of the Board of Regents and the University of Michigan Standard Practice Guide ("SPG"). *Id.* ¶¶ 6, 8. Section 3.10 of the Bylaws governs the ownership of patents and other property and SPG Number 303.4 ("the Policy") implements Section 3.10. ECF 134-4, PgID 6518.

The University's Office of Technology Transfer ("OTT") administers the Policy and periodically updates it. *Id.* For instance, one version of the Policy took effect January 1, 2007, and another version was issued in 2009. ECF 134-2, ¶¶ 8–9. The Policy "is applicable to all units of the University including its colleges, schools, departments, centers, institutes, and hospitals, and to all of its Employees." ECF 134-4, PgID 6518. The Policy defines an "employee" as:

a person who receives a salary or other consideration from the University for performance of services, part-time or full time. A University employee with less than a full year (e.g., 9-month) appointment shall be considered an "Employee" for acts during a period of appointment. A student that is compensated (e.g., financially through a stipend, tuition, etc., including graduate student research assistants and graduate student instructors) is considered an Employee under this Policy.

Id. at 6522–23. A "student" is defined as "a person enrolled in University courses for credit except when that person is an Employee." *Id.* at 6519.

The Policy also defines "intellectual property" and "inventor." Intellectual property under the Policy means "inventions, processes, compositions, life forms, computer software, copyrighted works, mask works, research tools and data, certain defined trade and service marks, Tangible Materials, and legal rights to the same." *Id.* at 6523. In the patent context, an "inventor" is "an Employee who has made an inventive contribution to

the Intellectual Property as defined under U.S. patent laws, meaning that an Inventor must have contributed to the conception of ideas claimed in a patent." *Id.*

Additionally, the Policy explains what intellectual property is owned by the University and the steps creators of intellectual property should take. On ownership, it states:

Intellectual Property made (e.g., conceived or first reduced to practice) by any person, regardless of employment status, with the direct or indirect support of funds administered by the University (regardless of the source of such funds) shall be the property of the University, except as provided by this or other University policy. Funds administered by the University include University resources, and funds for employee compensation, materials, or facilities.

Id. at 6518. In regard to intellectual property created by students, the Policy also notes that, although the University "will not generally claim ownership of Intellectual Property created by Students," it "does claim ownership of Intellectual Property created by students in their capacity as Employees or with direct or indirect support of funds administered by the University." *Id.* at 6519. In those cases, "students shall be considered to be Employees for the purposes of this Policy." *Id.* Employees are directed to disclose their creations and co-inventors to OTT even when they believe the creations are not owned by the University. *Id.*

Finally, section IV of the Policy addresses commercialization of intellectual property. That section contemplates that the University will sometimes transfer ownership of its intellectual property and explains who makes transfer decisions. Pursuant to the Policy, OTT, "[i]n consultation with Inventors, . . . [has] authority for decisions concerning the route of commercializing or transferring a particular Intellectual Property, as well as the selection and use of outside resources, including outside legal counsel, to assist in commercialization." *Id.* at 6520. OTT also has the "authority for those agreements that are primarily transfer of University-owned . . . patent rights[.]" *Id.* "Responsibility for patent

administration, including the retention of patent counsel, is shared by OTT and the Offices of the Vice President for Research and the General Counsel." *Id.*

II. Timeline

2004–2007: NeuroNexus and its Patents

Sometimes, the creation of intellectual property at the University results in spin-off companies. For example, NeuroNexus "was formed in 2004 to commercialize neural probe technologies that were developed in the College of Engineering at Michigan." ECF 134-28, PgID 6695. Prior to 2007, Kipke and others at NeuroNexus secured various patents in the neural-probe field. *See generally* ECF 134-16, PgID 6576–88.

NeuroNexus's patents would sometimes build on their previous work. According to Jamille Hetke, a NeuroNexus employee, in 2005 the NeuroNexus team was in the early stages of developing what it called a "Deep Brain Mapping Array" or "DBMA." ECF 134-16, ¶ 14. That work led to another idea, the "Deep Brain Stimulating Array" or "DBSA," in 2006. *Id.* ¶ 19. The DBSA is a "neural interface system" where the electrode sites are arranged circumferentially and axially around and along a cylindrical carrier. ECF 134-29.

On February 26, 2007, members of the NeuroNexus team filed a patent application for the DBSA concept, which was assigned number 60/891,641 (the '641 application). ECF 134-28. The '641 application would lead to the issuance of Patent No. 8,731,673 (the '673 patent) seven years later, ECF 134-29, but a great deal happened in the interim.

Summer 2007: Daneshvar Has An Idea and Shares It

In 2006 and early 2007, Eugene Daneshvar was a student pursuing a master's degree in Biomedical Engineering from the University of Michigan College of Engineering. ECF 65-10, PgID 3482; ECF 140-2, PgID 8984–85. During that time, he worked as a

graduate research assistant in the Neural Engineering Lab. ECF 65-10, PgID 3477–78. Daryl Kipke was a professor in the school's Department of Engineering and was serving as Daneshvar's faculty advisor. ECF 20-1, ¶¶ 7–8. Daneshvar's degree was conferred in May of 2007, but he continued to work in the lab through September of that year. ECF 135-10, PgID 8219. During the summer of 2007, he was admitted into a Ph.D. program at the University. *Id.*

In June of that year, Daneshvar had an idea for a neural probe technology. He described his idea, along with some drawings, on the pages of a notebook, each dated 6/13/07. See ECF 68-2, PgID 3984–85. At the bottom of each page were the signatures of Daneshvar (indicated as the inventor) and one Duna Raof (indicated as witness); both signatures were dated 6/13/07. *Id.*

The pages begin:

Novel Idea

This novel idea of incorporating conductive polymers onto neural probes, both rigid-like silicon substrates and flexible polymers substrates, for movement guidance and manipulation has occurred to me. I have not seen any application such as this before. I have seen applications of conductive polymers being used to bend substrates such as in "micromussels" work. I wish to apply this technology to neural probes in order to manipulate placement of the probes in-vivo.

Id. The pages then described how the idea would benefit surgeons and aid in "the quest for determining whether neurons 're-wire' themselves or surrounding neurons die etc." They went on:

The idea is that when that site is stimulated it would cause the conductive polymer to excite and bend the probe at that location. Having more than one of the bands would allow more degrees of freedom. . . . I believe to achieve this effect we could use an ordinary probe (current probe from NeuroNexus) and develop a preliminary mask to selectively sputter metal on top. Then we could apply PEDOT coating or PPY coating to the deposited metal and actuate.

Id. Some simple diagrams illustrating the concept accompanied the descriptions. *Id.* Daneshvar now calls the ideas conceived on that day the "Pivot Probe" and the "Pivot Electrode." ECF 135-18, PgID 8377.

Daneshvar explained his ideas to Kipke later that month, on June 21, 2007, in one of the University's buildings. *Id.*; ECF 65-10, PgID 3527, 3531. He sent an email to Kipke the same day, in which he confirmed their conversation, mentioned that he "would like to develop this idea as a start toward my PhD work," and stated the idea's potential applications. ECF 68-2, PgID 3987. Also that day, Kipke allegedly agreed to become Daneshvar's Ph.D. advisor. ECF 140-2, PgID 8985.

On July 7, 2007, Daneshvar visited Kipke in his office and struck up a conversation; Daneshvar recorded it and later had it transcribed. See ECF 23-1, PgID 195–97. Daneshvar seems to have raised concerns about protecting intellectual property prior to the conversation, and sought advice about how to talk about his work when seeking assistance from others at the University. Kipke offered some reassurances:

[H]ere's how I see what you're facing . . . You've come up with a, you know, a clever idea. We've identified this problem need and you've come up with a clever idea . . . and you know, you have to kinda figure out how to how to do it actually how to do the work. This is a university environment, it's open, it has to be open. The minute we, we kind put our IP blinders on in a university environment, the whole thing sorts to crumble. We don't do that. The . . . but what you do do is proceed in an intelligent manner by keeping a good lab notebook. Ok? . . . You don't have to hide anything, there's nothing to hide. . . . In saying that, you also don't have to . . . [s]pill the beans. Cause it's actually not even relevant for the discussion, you know the technical discussion.

Id. at 196.

Fall 2007: NeuroNexus Files the Application

On September 17, 2007, the NeuroNexus team submitted an invention disclosure to its attorney. ECF 140-22; ECF 140-21. According to Defendants, the invention disclosed

in that document led to NeuroNexus's filing of provisional patent application 60/980,657 (the '657 application) on October 17, 2007. ECF 140, PgID 8950; ECF 135-7. The '657 application later led to the issuance of U.S. Patent No. 8,565,894 (the '894 patent) on October 22, 2013. ECF 135-1. The listed inventors of the '894 patent are Rio Vetter, Daryl Kipke, and Jamille Hetke, and the sole assignee is NeuroNexus Technologies, Inc. *Id.* The nature of the patent is described *infra*.

2008: The Pursuit to Patent the Pivot Probe

On October 20, 2008—a little more than a year after Daneshvar initially shared his idea with Kipke—Daneshvar, Kipke, and post-doctoral researcher Mohammad Abidian submitted an Invention Disclosure (numbered 4204) to OTT that disclosed the "Pivot Probe." ECF 134-9. According to Daneshvar, Kipke had advised him to submit the disclosure and had added that NeuroNexus "was interested in licensing Daneshvar's invention." ECF 20-1, ¶ 13. Daneshvar also claims that "[o]n November 4, 2008, Kipke advised Daneshvar that a NeuroNexus lawyer would draft a provisional patent for Daneshvar's pivot probe invention." *Id.*, ¶ 14.

The day after that alleged conversation, Daneshvar, Kipke, and Abidian met with Robin Rasor, the OTT Director of Licensing. ECF 134-7, ¶ 5. She claims to have warned them that publication of concepts prior to applying for a patent could result in the loss of patent rights. *Id.* She also claims she explained to them "what constituted a publication" and instructed them to notify OTT before sending abstracts or presenting concepts at public venues. *Id.* She followed up the meeting with a brief email, explaining that she intended to engage Jeffrey Snyder, an attorney at the Harness Dickey law firm, and she did so on December 2, 2008. ECF 136-1; ECF 134-7, ¶ 6. In her declaration, Rasor explained that

Snyder's role was "to evaluate the patentability of any concepts disclosed in the [Pivot Probe disclosure] and, if any material was determined to be patentable, to potentially prepare any patent application based on it." ECF 134-7, ¶ 6. Snyder would also assist "in determining whether it would be worthwhile to spend additional University funds to file and prosecute a patent application covering concepts in the [Patent Probe disclosure]." *Id.* ¶ 9.

Razor sent an email to an attorney at Harness Dickey on November 6, 2008. ECF 140-3. She attached the 4204 Disclosure, along with other documents, and briefly mentioned some of the challenges they faced in patenting the technology. She ended: "So, take a look and then let's talk before we plan the application. Kipke's company has an IP counsel so we may also have them do some heavy lifting down the road and have you review and file." *Id.* Daneshvar was not a party to the email.

2009–2010: What Happened to the Pivot Probe IP

In the months that followed, Daneshvar corresponded with Snyder in an effort to prepare a patent application. ECF 65-10, PgID 3567–68, 3575, 3584. On February 20, 2009, Razor emailed Kipke, Daneshvar, and Abidian and relayed Snyder's conclusion that it would be better to further develop the Pivot Probe concept before applying for a patent. *Id.* at 3585; ECF 136-3. Daneshvar did not respond to the email. ECF 134-7, ¶ 11; ECF 65-10, PgID 3578.

Two months later, Daneshvar "submitted his work on pivot probes to be included in a conference presentation." ECF 20-1, ¶ 15. OTT learned of the presentation more than a year and a half later, in November 2010. ECF 134-7, ¶ 12. Snyder concluded that Daneshvar's submission to the presentation would preclude the patentability of the Pivot

Probe as laid out in the 4204 Disclosure, and Daneshvar agreed. *Id.*, ¶ 13. Consequently, OTT's efforts to patent the Pivot Probe ceased. *Id.*

Daneshvar then asked the University to assign to him its rights to the 4204 Disclosure and on November 17, 2011, the Regents approved the reassignment. ECF 140-11, PgID 9061, 9072. Next, Daneshvar sought and received the patent rights to the Pivot Probe from the NIH, confirmed by a letter dated May 14, 2012. ECF 140-12.¹

Late 2010–2012: Efforts Concerning the Pivot Electrode

Although OTT's efforts to patent the Pivot Probe ceased in late 2010, a new effort began. According to Rasor, during the November 2008 meeting that kicked off the effort to patent the Pivot Probe, Daneshvar had also shared the concept of the "Pivot Electrode." ECF 134-7, ¶ 14. She reasoned that since the Pivot Electrode had not been part of Daneshvar's submission to the April presentation, it might still be patentable, so she instructed Snyder to look into it. *Id.* OTT assigned a new number (4204.1) to the Pivot Electrode concept and directed Snyder to file a provisional patent application for it in March 2011. *Id.* ¶ 15. Snyder did so and the U.S. Patent Office assigned serial number 61/449,913 to the application. *Id.*

By the next year, however, OTT had "determined it would not pursue a non-provisional patent application for the 'Pivot Electrode' because the potential market and value did not justify further investment in the patent application." *Id.* ¶ 17. Because the National Institute of Health ("NIH") "had sponsored the research that led to the pivot electrode disclosure 4204.1 and the 61/449,913 application . . . OTT waived and released

¹ The letter lists the invention as "Articulating Neural Interface" and provides NIH identification numbers, but no patent application or OTT numbers.

to the NIH its interests in the provisional patent application serial number 61/449,913 on or about March 6, 2012." ECF 134-2, ¶¶ 22–23; ECF 140-4, PgID 9041.

Defendants claim that Daneshvar sought and secured the rights to the patent application from NIH, but later abandoned the effort to secure a patent. ECF 134, PgID 6496. Daneshvar does not dispute the point.

2011: Daneshvar's Discovery

According to Daneshvar, it was not until August of 2011, "while researching prior art relating to the pivot electrode," that he discovered the '657 application. ECF 20-1, ¶ 19. He later discovered three other patents—Nos. 13/236,973, 11/932,903, and 12/848,828—and claims that these patents include his ideas for "spatial 3D placement." *Id.* Daneshvar believes the application and patents contain his ideas.

2012: The Sale of NeuroNexus

In February 2012, a company called Greatbatch, Inc. acquired NeuroNexus, allegedly including "all of the intellectual property at issue in this lawsuit." *Id.* ¶ 20; ECF 17, ¶ 20.

III. The '894 Patent

Since much of the case concerns the '894 Patent, a brief description is pertinent. The invention contained within the '894 patent is described as a "three dimensional system of electrode leads," ECF 135-1, PgID 7157, and utilizes the concept from the '673 Patent by essentially marrying three of the '673 arrays into a single, three-pronged unit. The diagram included in the '894 Patent depicts three prongs, called "subsystems," that are joined together. These subsystems are connected to "guiding elements" that allow a user to move and manipulate each subsystem. According to the patent, the carrier in each subsystem is "rigid." *Id.*, col.8.

The patent explains that a guiding element is "preferably one of several variations," *id.*, col.2, and describes two variations. In the first variation, the guiding element contains several "joints or connections" that a user can manipulate by using "a system of cables or robotics," or may be guided "remotely and/or wirelessly or in any other suitable fashion with any suitable combination of elements." *Id.* The second variation does not use joints, but rather, is "biased," meaning it has a particular, fixed shape but is made of a "material with shape memory or high elasticity." *Id.* In that variation, the biased subsystems are sheathed in a tube to keep them straight, but when the tube is pulled back, the subsystems spread out or otherwise re-arrange themselves. The patent further explains:

[t]he material of the biased guiding element [] is preferably an elastic material such as metal or plastic, or shape memory material such as nitinol. The material may alternatively be made from any suitable material. The shape memory material may change shape due to temperature, electrical stimulus, or any other suitable mechanism.

Id., col.3.

STANDARD OF REVIEW

Summary judgment is proper if there is "no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). A fact is material for purposes of summary judgment if its resolution would establish or refute an "essential element[] of a cause of action or defense asserted by the parties[.]" *Kendall v. Hoover Co.*, 751 F.2d 171, 174 (6th Cir. 1984).

In considering a motion for summary judgment, the Court must view the facts and draw all inferences in the light most favorable to the non-moving party. *Stiles ex rel. D.S. v. Grainger Cty., Tenn.*, 819 F.3d 834, 848 (6th Cir. 2016). The Court must then determine "whether the evidence presents a sufficient disagreement to require submission to a jury

or whether it is so one-sided that one party must prevail as a matter of law." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 251–52 (1986). And although the Court may not make credibility judgments or weigh the evidence, *Moran v. Al Basit LLC*, 788 F.3d 201, 204 (6th Cir. 2015), a mere "scintilla" of evidence is insufficient to survive summary judgment; "there must be evidence on which the jury could reasonably find for the plaintiff," *Anderson*, 477 U.S. at 252.

DISCUSSION

I. Correction of Inventorship (Count IV)

Daneshvar claims that because he "disclosed novel limitations of the '894 patent to Kipke," he should be declared a co-inventor of the '894 patent. ECF 20-1, ¶ 36. Defendants argue that Daneshvar has failed to overcome the presumption of the patent's validity and they make several arguments against Daneshvar's alleged co-inventorship.

A. Legal Standards for Patent Challenges and Joint Inventorship

"The inventors named on United States patents are presumed correct." *Regents of Univ. of Mich. v. Bristol-Myers Squibb Co.*, 301 F. Supp. 2d 633, 642 (E.D. Mich. 2003), *aff'd* (July 12, 2004) (citing *Hess v. Advanced Cardiovascular Sys., Inc.*, 106 F.3d 976, 980 (Fed. Cir. 1997)). To overcome the presumption, a plaintiff must prove "by clear, convincing and corroborated evidence" that he is a joint inventor "of the subject matter claimed" in the patent. *Id.* The plaintiff's testimony, standing alone, is insufficient; he "must supply evidence to corroborate his testimony." *Ethicon, Inc. v. U.S. Surgical Corp.*, 135 F.3d 1456, 1461 (Fed. Cir. 1998). Although corroborating evidence "preferably comes in the form of physical records that were made contemporaneously with the alleged prior invention[,] . . . [c]ircumstantial evidence about the inventive process may also corroborate," as can "oral

testimony of someone other than the alleged inventor[.]” *Trovan, Ltd. v. Sokymat SA, Irori*, 299 F.3d 1292, 1302–03 (Fed. Cir. 2002) (internal citations omitted).

Although there is no “bright-line standard” to determine joint inventorship, to be a joint inventor, a person must have contributed “in some significant manner to the conception of the invention” such that he contributes “to the joint arrival at a definite and permanent idea of the invention as it will be used in practice.” *Fina Oil & Chem. Co. v. Ewen*, 123 F.3d 1466, 1473 (Fed. Cir. 1997). And a co-inventor does not need to make a contribution to every claim of a patent, but rather a “contribution to one claim is enough.” *Ethicon*, 135 F.3d at 1460 (citing 35 U.S.C. § 116).

In light of the standards, Daneshvar must show, through clear, convincing, and corroborated evidence, that he contributed to the joint arrival of a definite, permanent idea in at least one of the claims in the '894 patent. The Court will begin by constructing the relevant terms used in the patent.

B. Claim Construction

In determining inventorship, the first step is to construct, i.e., construe, any patent claim in dispute to determine the subject matter encompassed by the claim. *See Trovan*, 299 F.3d at 1302. “The second step is then to compare the alleged contributions of each asserted co-inventor with the subject matter of the properly construed claim to then determine whether the correct inventors were named.” *Id.* Claim construction is a question of law for the Court to decide. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 977 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370 (1996). To construct claims, the Court has three options: “(1) interpret the claims on the paper record, if possible; (2) hold a separate bench trial to resolve the disputes surrounding claim interpretation before trial; or (3) wait until the

actual trial and rule on the claim interpretation issues just prior to instructing the jury." *Moll v. N. Telecom, Inc.*, No. CIV. A. 94-5451, 1995 WL 733389, at *3 (E.D. Pa. Dec. 11, 1995) *aff'd*. 119 F.3d 17, 1997 WL 394241 (Fed. Cir. 1997) (table).

Pursuant to the Court's order, the parties filed a joint claim construction statement. ECF 170. The parties jointly and individually proposed several claims found in the '894 Patent requiring construction. After reviewing the proposed definitions, the Court finds that the claims can all be constructed on the paper record, without the need for an additional hearing.

Claim terms are generally given their "ordinary and customary meaning"—that is, "the meaning that the term would have to a person of ordinary skill in the art in question at the time of . . . the effective filing date of the patent application." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc); *see also In re Nelson*, 280 F.2d 172, 181 (C.C.P.A. 1960) ("[D]escriptions in patents are not addressed to the public generally, to lawyers or to judges, but . . . to those skilled in the art to which the invention pertains or with which it is most nearly connected."), *overruled on other grounds by In re Kirk*, 376 F.2d 936 (C.C.P.A. 1967). Still, "[o]rdinary meaning is not something that is determined in a vacuum. To the contrary, a word describing patented technology takes its definition from the context in which it was used by the inventor." *Eon Corp. IP Holdings v. Silver Spring Networks*, 815 F.3d 1314, 1320 (Fed. Cir. 2016), *cert. denied sub nom. EON Corp. IP Holdings LLC v. Silver Spring Networks, Inc.*, 137 S. Ct. 640 (2017) (citations and quotation marks omitted).

The most important resource for the Court in claim construction is "intrinsic evidence," which includes the patent claims themselves, the specification of the patent, and the

prosecution history. *Phillips*, 415 F.3d at 1314. And the specification, in particular, "provides necessary context for understanding the claims, and 'is always highly relevant to the claim construction analysis.'" *Abbott Labs. v. Sandoz, Inc.*, 566 F.3d 1282, 1288 (Fed. Cir. 2009) (quoting *Phillips*, 415 F.3d at 1315); see also *Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1354, 1360 (Fed. Cir. 2004) ("In most cases, the best source for discerning the proper context of claim terms is the patent specification[.]"). The Court may also refer to "extrinsic evidence" in claim construction, such as treatises, dictionaries, and the testimony of experts and inventors. *Phillips*, 415 F.3d at 1319. Nonetheless, such sources are "unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence." *Id.*

With the foregoing standards in mind, the Court's constructions of each claim are as follows:

1. "Shape Memory Material"

Both parties have asked the Court to construct the term "shape memory material" and their definitions are almost identical; only two differences require resolution. ECF 170, PgID 9976. First, Daneshvar suggests that a material exhibiting a "shape memory effect" can either return to its original shape or change shape, while Defendants only allow that the material would return to its original shape. *Id.* Second, Daneshvar lists the catalysts for shape change as "temperature, electrical stimulus, or any other suitable mechanism," while Defendants suggest only "heating or other stimulus." *Id.*

In the '894 Patent, shape memory material is used to create the "biased" version of the guiding element described above. The term "shape memory material" appears in only

two claims: claim 16 ("The electrical lead of claim 1 wherein the guiding element is of a shape memory material.") and claim 17 ("The electrical lead of claim 16 wherein the shape memory material is adapted to change shape upon either a change in temperature or electrical stimulation."). ECF 135-1, col.9 ll.10–14. But the specifications speak more broadly. They explain that the biased guiding element could be made of "elastic material such as metal or plastic, or a shape memory material such as nitinol. The material may alternatively be made from any suitable material." *Id.*, col.3 ll.8–11. The language of the specifications in regard to the catalyst for shape-changing is the same as the language of claim 17: the "shape memory material may change shape due to temperature, electrical stimulus, or any other suitable mechanism." *Id.*, col.3 ll.11–13. The Court must therefore determine whether "shape memory material" as used in claim 16 also includes materials that change to a shape other than their original shape.

The specifications are an invaluable aid in constructing a patent's claims and the terms within the claims. As the Federal Circuit has explained:

The Patent and Trademark Office ("PTO") determines the scope of claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction "in light of the specification as it would be interpreted by one of ordinary skill in the art." *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). Indeed, the rules of the PTO require that application claims must "conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description." 37 C.F.R. § 1.75(d)(1). It is therefore entirely appropriate for a court, when conducting claim construction, to rely heavily on the written description for guidance as to the meaning of the claims.

Phillips, 415 F.3d at 1316–17. The importance of the specification is due, in part, to the patent applicant's ability to "define a claim term in the specification in a manner inconsistent with its ordinary meaning." *Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d

1354, 1360 (Fed. Cir. 2004) (quotation marks omitted). Thus "[i]n most cases, the best source for discerning the proper context of claim terms is the patent specification wherein the patent applicant describes the invention." *Id.*

Here, the specification makes several allowances beyond the confines of "shape memory material" strictly construed. The specification allows for "any suitable material," not just shape memory materials and states that the material "may change shape," not just return to its original shape. Thus, even though Defendants' proposed construction might accurately describe "shape memory material" when reading the claims in isolation, in context, Daneshvar's broader construction is more consistent with the patent as whole.

Accordingly, the Court adopts Daneshvar's construction and finds that "shape memory material" is "a material that exhibits a 'shape memory effect' such that it can be temporarily deformed, but will return to its original shape, or change shape, due to temperature, electrical stimulus, or any other suitable mechanism."

2. "First/Second Three-Dimensional Shape"

Daneshvar has asked the Court to construct the term "first/second three-dimensional shape." ECF 170, PgID 9978. He proposes a somewhat cumbersome definition while Defendants suggest the Court adopt the plain meaning of the term.

The patent repeatedly uses the terms "first three-dimensional shape" which is then differentiated by a "second three-dimensional shape." See, e.g., ECF 135-1, col.8 ll.19–29, col.9 ll.27–39. After reviewing the specifications and claims, the Court finds that in general, the patent's applicants did not define those terms "in a manner inconsistent with [their] ordinary meaning," *Metabolite*, 370 F.3d at 1360 (quoting *Boehringer Ingelheim Vetmedica, Inc. v. Schering–Plough Corp.*, 320 F.3d 1339, 1347 (Fed. Cir. 2003)). Only one clarification

is necessary. The word "second" can mean "number two in a countable series," *Webster's Third New International Dictionary* 2050 (2002), which might limit the claim to devices which change from an initial shape to a different shape, but would not include a device which could then change to a third shape, different from the previous two shapes. But "second" can also mean, "additional" or "subsequent." *Compact Oxford Thesaurus* 736 (3d ed. rev. 2008). In light of the Court's findings regarding "shape memory material," the broader definition is more consistent with the patent as a whole.

Accordingly, the Court accepts Defendants' suggestion to apply the plain meaning of the terms and finds that "first three-dimensional shape" means the initial form—the form of an object prior any subsequent change, while "second three-dimensional shape" means the form of an object subsequent to some change.

3. "Guiding Element"

Both parties asked the Court to construct the term "guiding element." Their competing definitions state not so much differences of kind as of particularity. Although Daneshvar provides five paragraphs, each with an alternative definition, the Court finds Defendants' succinct definition more useful in reading and understanding the patent while remaining consistent with the patent's various references to "guiding element."

To begin, the patent claims four different "electrode lead[s] for implantation into body tissue." ECF 135-1, PgID 7163–64 (claims 1, 19, 27, and 38). Each of those leads includes at least one guiding element. The "Description of Preferred Embodiments" section of the specifications describes two specific variations of the guiding element. ECF 135-1, col.1–3. In the first variation, the guiding element is "maneuverable" via "a system of cables or robotics" or "remotely and/or wirelessly or any other suitable fashion" and "may further

include joints or connections." *Id.*, col.2 ll.36–50. In the second variation, the guiding element is "biased to move into a three-dimensional arrangement." *Id.*, ll.53–55. In that variation, the guiding element is "made from a material with shape memory or high elasticity" and "may change shape due to temperature, electrical stimulus, or any other suitable mechanism." *Id.*, col.2 ll.56–57, col.3 ll.12–13.

The abstract makes clear what the guiding element is used for: to position electrical subsystems in three-dimensional arrangements. *Id.* at PgID 7157. And the guiding element is used for that purpose throughout the patent. Defendants' construction is consistent with the purpose and description when it is clarified in two ways. First, Defendants desire to limit the guiding element to moving from a "first three-dimensional shape" to "a different second shape." As described above, in the context of the patent as a whole, "second" is more appropriately understood as "additional" or "subsequent." Second, Defendants' proposed construction describes the guiding element as positioning an "electrode array" rather than a "subsystem." Although the claims of the patent distinguish the constituent parts of the subsystem, see *id.*, col.8 ll. 11–18 (separately claiming the carrier and the array itself), the subsystem is principally an electrode array. Defendants' phrasing is therefore accurate and helpful in understanding the role and purpose of the guiding element. Accordingly, the Court adopts a modified version of Defendants' proposed construction and finds that a "guiding element" as used in the patent is "a connecting structure that positions the electrode array, moves from one shape to one or more different shapes, and is connected to the electrode array at its distal end."

4. "Rigid"

Both parties have asked the Court to construct the term "rigid." Defendants suggest using the plain meaning, while Daneshvar suggests a more particularized definition, borrowing language from different portions of the patent. Again, a simpler definition suffices.

Although the specifications and claims employ the word "rigid" differently, the plain meaning of the term is common to both. The claims only use "rigid" in one way: as a modifier for "three-dimensional shape." See, e.g., *id.*, col.8 ll.10–25. The specifications speak of both "a rigid material" which "may be uniformly rigid, or rigid only in a particular direction (such as the axial direction)," *id.*, col.3 ll.30–34, and also permit that a carrier which "is preferably flexible" may "alternatively be rigid or semi rigid," *id.*, col.7 ll.1–3. But in every case, "rigid" is used in its plain and ordinary sense: "very firm, rather than pliant in composition or structure; lacking or devoid of flexibility[.]" *Webster's Third New International Dictionary* 1957 (2002). Or as Defendants put it, "unable to bend or be forced out of shape, not flexible." ECF 170, PgID 9976. The patent specifications merely describe materials that are rigid in one way, but not in another—the meaning of "rigid" remains the same. Nothing in the claims or specifications suggests a different or special meaning.

Accordingly, the Court finds that "rigid" as used in the patent means "firm and inflexible."

5. "Carrier"

Daneshvar has asked the Court to construe the term "carrier," and offers four paragraph-long definitions. Defendants suggest a shorter definition: "[a] three-dimensional supporting member to which the substrate of the electrode array is attached." ECF 170, PgID 9977. The Court will adopt Defendants' construction.

The carrier is most thoroughly described in Section Four of the specifications, titled "Variations of the Preferred Embodiments," and is component "15" in the accompanying illustrations. See ECF 135-1, col.6–8. The carrier principally functions to "shuttle the first electrical subsystem and the connector into tissue or other substances," but it can also serve to "provide structural support" to a subsystem. *Id.*, col.6 ll.42–47, col.7 ll.12–15. Section Four explains that the "shape of the carrier is preferably tubular" but allows for "any suitable shape," *id.*, col.6 ll.47–49, and likewise allows for the carrier to be made of any "suitable material," *id.*, col.6–7. Section Four also suggests that the carrier may house channels through which fluid could be transmitted. *Id.*, col.6 ll.52–56.

Defendants' proposed definition is consistent with the patent as a whole. The Court finds that a "carrier" is a three-dimensional supporting member to which the substrate of the electrode array is attached.

6. Elements 1(a) and 1(b)

Finally, Defendants have asked the Court to construct subparts (a) and (b) of claim 1 *in toto*. They suggest precise definitions of the two subparts while Daneshvar appeals to the definitions he proffered for the terms "rigid" and "carrier," which are both used in the subparts. See ECF 170, PgID 9978.

There are two problems with Defendants' proposed constructions. First, they are narrower than the claim itself. Second, they would not make the claim any clearer for a jury.

First, Courts must "avoid the danger of reading limitations from the specification into the claim," and are not to limit a claim to a preferred embodiment. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005). Although the specifications principally describe the carrier as "cylindrical" or "tubular," and a cylindrical shape is clearly the preferred

embodiment, the specifications nevertheless suggest that the carrier may "be any suitable shape of any suitable diameter for the desired functions." ECF 135-1, col.6 ll.47–49. Claim 1 does not mention the shape of the carrier, but Daneshvar's proposed construction does. Accordingly, the Court finds that Defendants' proposed construction would improperly limit the scope of claim 1.

Second, "[c]laim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement." *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997). The Court has already constructed the terms "carrier," "rigid," and "three-dimensional shape"—all substantially along the lines proposed by Defendants. Absent those terms, the subparts leave little left to interpret. The Court finds that constructing the subparts as suggested by Defendants would not make the terms any clearer, but rather, would run the risk of improperly changing the scope of claim 1. The Court will therefore decline to further construct subparts (a) and (b). The language of the subparts will be construed according to the Court's previous term constructions and the plain meaning of the remaining words.

C. The Relevant Corroborating Evidence

To determine what evidence is corroborative, the Court must first consider the window of time that is relevant to Daneshvar's inventorship claim. Although the amended complaint asserts that "Daneshvar discussed his inventions with Kipke from 2007 into 2010," Daneshvar claims he conceived his Pivot Probe idea on June 13, 2007 and disclosed the idea to Kipke on June 22, 2007. ECF 20-1, PgID 155, ¶ 10. The application that led to the '894 patent was filed on October 17, 2007. ECF 135-7, PgID 8167.

Accordingly, the only relevant window in determining whether Daneshvar contributed to a claim in the '894 patent is June 13, 2007 to October 17, 2007. The only corroborating evidence of what Daneshvar disclosed to Kipke is his notebook, the email he sent to Kipke on June 21, 2007, and the transcription of his conversation with Kipke on July 7, 2007.

The disclosures in that corroborated evidence are limited. The principal idea contained in the lab notebook is the bending of a neural probe using a conductive polymer actuator. The notes permit that the idea could be applied to "both rigid-like silicon substrates and flexible polymers substrates," but this is the sum total of the idea. See ECF 68-2, PglD 3984–85. A bit more about the idea's application is disclosed in the email; Daneshvar suggests that his idea could be used "to design a new probe that sends out its recording sites away from the shank similar to John's idea" and also that it could be applied in "bypassing vasculature, targeting specific layers (horizontally)," and could be incorporated into NeuroNexus' DBMA "and Medtronic's stimulating electrode, etc." ECF 68-2, PglD 3987. The transcript adds nothing more to the contours of the idea.

Daneshvar maintains he disclosed a much broader range of information to Kipke, but he lacks corroborating evidence. For instance, in his amended complaint, he claims that by June 2007, he had conceived "navigation methods for deep brain stimulation" which included the "spatial 3D placement of the leads to provide electrode sites in separate areas for neurological pathway feedback." ECF 20-1, PglD 154, ¶ 9. In their interrogatories, Defendants asked Daneshvar to specifically identify the corroborating evidence of the conception and "the circumstances under which [it had] been reduced to practice[.]" ECF 135-32, PglD 8579. But the only evidence Daneshvar provided that was created within the relevant window of time is his lab notebook. *Id.* at 8593–602.

The only idea contained in the corroborated evidence is the bending of a neural probe using a conductive polymer actuator. Thus, Daneshvar is left to show that his limited idea concerning conductive polymers contributed in a significant manner to the arrival at one of the claims in Patent '894.

D. The Relevant Patent Claims

There are 41 total claims in the '894 patent, and Daneshvar alleges he contributed to claims 1, 2, 5–7, 14–18, and 41. ECF 135-22, PgID 8490. Claim 1 is the lengthiest of the claims and several of the other claims refer to claim 1. The claim also employs several of the terms constructed by the Court above. The Court will employ those constructions to evaluate whether Daneshvar's corroborated evidence demonstrates that he contributed to the joint arrival of a definite, permanent idea in claim 1 and its subclaims.

1. Claim 1

Claim 1(a) is a three-dimensional supporting member—to which an electrode array is attached—that is comprised of a firm, inflexible, three-dimensional shape extending along its length from proximal end to distal end. The language is consistent with the drawings included in the patent's specifications that depict a straight cylinder attached to a separate, bendable portion (described as the "guiding element"). ECF 135-1, PgID 7159. The electrodes themselves are all on the rigid cylinder portion. In contrast, Daneshvar's notes describe an arrangement in which the electrodes are on the bendable portion. The notes do describe "both rigid-like silicon substrates and flexible polymers substrates," but the notes make clear that the underlying idea is to bend *substrates* using conductive polymers, not a separate guiding element. ECF 68-2, PgID 3984–85. Daneshvar's idea about bendable substrates is at odds with the "carrier" described in claim 1(a).

Claim 1(b) is an electrode array comprising a plurality of electrodes supported on the component of the electrode lead described in claim 1(a), i.e., the carrier. The patent specifications (including the drawing) and claim 1(e) make clear that the electrode array surrounds the cylindrical carrier. See ECF 135-1, col.5 ll.11–14, col.8 ll.30–39. In contrast, Daneshvar's notes describe and depict a probe with electrodes on only one side. His notes suggest "us[ing] an ordinary probe (current probe from NeuroNexus)[,]" ECF 68-2, PgID 3985, and as Hetke explained, that sort of probe "has only a single row of electrodes on one side or face of the probe." ECF 134-16, PgID 6599. The latter is what is depicted in Daneshvar's drawings. Daneshvar's notes further confirm that his corroborated idea was limited to a single-sided array. When he explained where to apply the necessary coating for his idea, he noted that "I would have wanted to apply this to the back of the probe in order to not lose any sites, but for now I will stick to the current probes we have for preliminary proof of concept." ECF 68-2, PgID 3985. Thus, even the approach Daneshvar "would have wanted" presupposes a single-sided array, because it would have avoided the side with the electrodes. Accordingly, Daneshvar's notes preclude the three-dimensional array described in claim 1(b).

Claims 1(c) and (d) describe a "guiding element" that is maneuverable from an initial shape into subsequent shapes. See construction of the term "second," *supra*. The claims specifically note that although the guiding element changes shape, the carrier to which it is attached "maintains its rigid, three-dimensional shape." ECF 135-1, col.8, ll.19–29. Since the carrier is, by definition, the component to which the substrate of the array is attached, a substrate that changes shape is inconsistent with the claims of 1(c) and (d). Yet this is

precisely the description disclosed in Daneshvar's lab notes; the claim and his invention are therefore incompatible.

Finally, claim 1(e) details the circumferential arrangement of the electrodes on the carrier. Daneshvar's notes do not provide for the specific number or placement of the electrodes and, as noted, are inconsistent with a three-dimensional carrier. His notes are irrelevant to claim 1(e).

In sum, Daneshvar has not shown sufficient corroborated evidence to support the claim that he contributed to the joint arrival of a definite, permanent idea in claim 1.

2. Claims 2, 5–7, and 14–18

Daneshvar also argues he contributed to claims 2, 5–7, and 14–18. But those claims are all subsidiary to claim 1. Each of the claims merely emphasizes a particularity of the underlying claim 1, and none touches on a technology or method mentioned in Daneshvar's corroborated evidence. The inapplicability of claims 16 and 17, however, bears clarification.

Claim 16 is the "electrical lead of claim 1 wherein the guiding element is of a shape memory material" and claim 17 is the "electrical lead of claim 16 wherein the shape memory material is adapted to change shape upon either a change in temperature or electrical stimulation." ECF 135-1, col.9, ll.11–14. Daneshvar's notes do not describe use of shape memory materials. Rather, they describe using conjugated polymer actuators; and the two are different. See ECF 134-43, PgID 7136. So the claim is, on its face, inapplicable to Daneshvar's disclosures.

But even if the distinction between the materials was blurred, Daneshvar would have to do more than simply disclose the idea of using one of the materials—shape memory or conjugated polymers—in the field of neural probes. For a joint inventor must "do more than

merely explain to the real inventors well-known concepts and/or the current state of the art." *Pannu v. Iolab Corp.*, 155 F.3d 1344, 1351 (Fed. Cir. 1998). And even if a person "supplies a component essential to an invention," his contribution is "insufficiently significant . . . if the component and the principles of its use were known in the prior art." *Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., Inc.*, 776 F.3d 837, 845 (Fed. Cir.), *cert. denied*, 136 S. Ct. 189 (2015), *and abrogated on other grounds by Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923 (2016). Hetke explained that the idea of using conductive polymers in neural probes was known in the field at least two years before Daneshvar's disclosures. See ECF134-16, ¶¶ 29–30 (citing to and describing the work of Rodolfo Llinas). Daneshvar's disclosure of using a conductive polymers to actuate a neural probe is therefore not a sufficient contribution to qualify him as co-inventor of claims 16 and 17.

3. Claim 41

Daneshvar also asserts he is the co-inventor of claim 41. That claim is almost identical to claim 1: it too describes an "electrode lead for implantation into body tissue" and consists of five subparts which track the language of claim 1. The only difference is that instead of describing the carrier as "rigid," claim 41 describes it as "cylindrical." The analysis of claim 1 is therefore equally applicable to claim 41. Daneshvar has not shown corroborated evidence to support the claim that he contributed to the joint arrival of a definite, permanent idea in claim 41.

E. Conclusion

Daneshvar has not shown through clear, convincing, and corroborated evidence that he contributed to the joint arrival of a definite, permanent idea in any of the claims in the

'894 patent. He has therefore not overcome the presumption that the patent's named inventors are correct. His claim for inventorship must fail.

II. Tort Claims (Counts I, II, and III)

Only three tort claims remain in the case: fraud, breach of fiduciary duty and unjust enrichment. See ECF 42, PgID 703. Defendants argue that because Daneshvar is not an inventor of the '894 Patent, his remaining tort claims must fail. Daneshvar disagrees, contending that because he seeks damages arising from Greatbatch's acquisition of NeuroNexus—which "occurred before the issuance of the '894 patent"—his claims are not preempted. ECF 140, PgID 8961.

A. Preemption Under 35 U.S.C. § 262

When state law conflicts with federal law, the state law is without effect. *Univ. of Colo. Found., Inc. v. Am. Cyanamid Co.*, 196 F.3d 1366, 1371 (Fed. Cir. 1999) (*Cyanamid IV*).

As the Federal Circuit has explained:

Federal preemption takes three basic forms: First, Congress may explicitly preempt state law; second, a federal scheme may occupy a given field and thus preempt state law in that field; and third, when compliance with both state and federal law is impossible, the conflicting state law is preempted. Whatever the form, the key is whether the operation of state law "stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress."

Univ. of Colorado Found., Inc. v. Am. Cyanamid Co., 342 F.3d 1298, 1305 (Fed. Cir. 2003) (*Cyanamid VI*) (quoting *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 479 (1974)) (internal citation omitted).

Federal patent laws have three discrete purposes: (1) provide an incentive to invent, (2) promote the full disclosure of inventions, and (3) ensure that "that which is in the public domain cannot be removed therefrom by action of the States." *Dow Chem. Co. v. Exxon Corp.*, 139 F.3d 1470, 1474 (Fed. Cir. 1998) (quoting *Kewanee Oil*, 416 U.S. at 480–81).

It follows that state laws which do not frustrate those purposes are not preempted by federal patent laws. So when a claim involves a dispute over inventorship, patent law sometimes preempts the state law claims—but not always. See, e.g., *HIF Bio, Inc. v. Yung Shin Pharm. Indus. Co.*, 600 F.3d 1347, 1357 (Fed. Cir. 2010), as amended on reh'g in part (June 14, 2010). Thus, to determine whether the state-law claims are preempted, the Court must first identify the elements of each claim and how Daneshvar alleges the Defendants committed wrongdoing. The Court will therefore take each claim in turn, first to evaluate preemption, and then—if necessary—to evaluate the claim's merits.

B. Fraud (Count I)

In a previous order, the Court partially dismissed Daneshvar's fraud count and left only the allegation arising under "bad faith." ECF 42. The Court explained that Daneshvar's complaint adequately pled fraud by alleging that Kipke "promised Daneshvar that Neuronexus would file a provisional patent on Daneshvar's behalf, even though Neuronexus had already patented the technology." *Id.* at PgID 698–99. The Court also explained the elements of fraud:

To state a claim for fraudulent misrepresentation, a plaintiff must prove six elements: (1) the defendant made a material representation; (2) the representation was false; (3) when the defendant made the misrepresentation, it knew that it was false, or made the representation recklessly, without any knowledge of its truth, and as a positive assertion; (4) the defendant made the representation with the intention that it should be acted on by the plaintiff; (5) the plaintiff reasonably relied on the representation; and (6) the plaintiff suffered injury due to his reliance on the representation. *MacDonald v. Thomas M. Cooley Law School*, 724 F.3d 654, 662–63 (6th Cir. 2013) (citing *Hord v. Env'tl. Research Inst. Of Mich.*, 463 Mich. 399, 404 (2000)).

Id. at 695. The Court further explained that, generally, future promises do not constitute fraud unless the "promise is made in bad faith without the intention to perform it." *Id.* at 697 (quoting *Derderian v. Genesys Health Care Sys.*, 263 Mich. App. 364, 378 (2004)). Thus,

Daneshvar must not only show that Kipke promised to file the provisional patent, but also that Kipke did not intend to perform the promise at the time he made it "or almost immediately thereafter." *Derderian*, 263 Mich. App. at 379.

The claim is not preempted. Michigan's prohibition on inducing action through false statements does not stand as an obstacle to federal patent law's purposes of incentivizing invention, promoting disclosure, and providing uniformity of protections. The Federal Circuit has routinely held that wrongdoing in the events preceding the grant of a patent can be actionable under common law. *See, e.g., Cyanamid IV*, 196 F.3d at 1371–72; *HIF Bio*, 600 F.3d at 1357.

But just because the claim is not preempted, does not mean it survives summary judgment. Although the evidence must be viewed in a light most favorable to Daneshvar, there must be enough evidence that a reasonable jury could find in his favor. And there is not. Daneshvar has failed show that he reasonably relied on Kipke's alleged representations and that he suffered injury due to his reliance.

Under Michigan law, a plaintiff's reliance on an oral statement is not reasonable when it is "contradicted by a written contract between the parties or otherwise conflict[s] with a written document that is readily available to the plaintiff." *Miller v. CVS Pharmacy, Inc.*, 779 F. Supp. 2d 683, 689 (E.D. Mich. 2011) (quoting *Chimko v. Shermeta*, No. 264845, 2006 WL 2060417, at *3 (Mich. Ct. App. July 25, 2006)). Daneshvar argues that Michigan law requires the document to be a written contract between the parties. ECF 140, PgID 8972. Although Michigan courts have routinely determined cases based on written contracts, *see, e.g., Novak v. Nationwide Mut. Ins. Co.*, 235 Mich. App. 675, 689, 599 N.W.2d 546, 553 (1999), the rule is not so narrow. As one court explained, "plaintiffs cannot claim to have

been defrauded when they had information available to them that they chose to ignore." *Webb v. First of Michigan Corp.*, 195 Mich. App. 470, 475, 491 N.W.2d 851, 854 (1992). See also *Schuler v. Am. Motors Sales Corp.*, 39 Mich. App. 276, 279–80, 197 N.W.2d 493, 495 (1972) (concluding that the availability of written inventory lists made plaintiff's reliance on oral statements about the inventory unreasonable).

Still, the inquiry is about reasonableness; the context of the case and the contents of the documents matters. Thus, the responsibility to seek out and review documents weighs differently from party to party. Compare *Aron Alan, LLC v. Tanfran, Inc.*, 240 F. App'x 678, 684 (6th Cir. 2007) (recognizing that parties entering a franchise agreement were expected to do so with "their eyes open" and consistent with due diligence) with *Chimko*, 2006 WL 2060417, at *4 (concluding that a close personal, professional, and fiduciary relationship lessened the expectation that the plaintiff independently seek out financial documents).

The relevant timeline is: Kipke allegedly told Daneshvar that his company would file a patent application on his behalf. Shortly thereafter, Daneshvar signed a statement admitting that he had reviewed a policy that made it clear that OTT was in the driver's seat when it came to commercializing any intellectual property developed by Daneshvar, and that OTT made the decisions to use outside legal counsel. See "Intellectual Property at the University of Michigan," *supra*; ECF 134-4, PgID 6520. Less than a month after signing the statement, Daneshvar, along with Kipke, met with OTT's Director of Licensing, who further explained the patenting process at the University and told Daneshvar and Kipke—in an email the very next day—the name and firm of the attorney she was engaging to prepare a patent. Daneshvar corresponded with that attorney about the potential patent in the

immediate months and years that followed before finally recognizing that, due to his own disclosure, his idea would not be patented.

In light of all this, and with the paucity of evidence to the contrary, the Court finds that no reasonable jury could find that Daneshvar reasonably relied on Kipke's alleged statements about NeuroNexus filing a patent application on his behalf. Even assuming Kipke owed fiduciary duties to Daneshvar, it was not reasonable for Daneshvar to hang his hat on a single statement from Kipke while proceeding through the University's patent process and corresponding with the patent attorney. His fraud claim must therefore fail.

C. Breach of Fiduciary Duty (Count II)

"A breach of fiduciary duty claim under Michigan law has three elements: (1) a duty arising from a fiduciary relationship, (2) a failure to observe that duty, and (3) an injury proximately caused by that failure." *Prime Rate Premium Fin. Corp. v. Larson*, No. 14-12397, 2016 WL 7439192, at *7 (E.D. Mich. Dec. 27, 2016). Daneshvar's argues that Kipke's role as Daneshvar's Faculty Advisor and "advisor on patent issues" created a fiduciary duty. ECF 20-1, PgID 158. Then, Defendants failed to observe that duty by "(1) inducing Daneshvar to fully disclose his inventions to them under false pretenses; (2) using Daneshvar's inventions for their own enrichment; and (3) effectively precluding Daneshvar from patenting inventions[.]" *Id.* at 159. As a result, Daneshvar states simply that he "has been damaged by such breaches." *Id.*

The claim is not preempted by federal patent law. Michigan's interest in enforcing fiduciary duties owed to a beneficiary runs wholly separate from the purposes of federal patent law. And Daneshvar's breach of fiduciary duty claim arises only incidentally from a dispute involving patents. Thus, while federal patent law determines who the inventors of

the '894 patent are—and how those inventors may profit from the invention—it does not preclude Daneshvar from bringing a state-law claim that alleges wrongdoing in securing the patent.

Nevertheless, the claim fails. Assuming, without deciding, that Kipke owed Daneshvar fiduciary duties, Daneshvar has not satisfied the second element of the cause of action. Defendants did not "induce Daneshvar to fully disclose his inventions" or "us[e] Daneshvar's inventions for their own enrichment" because Daneshvar is not an inventor of the '894 patent. And because he is not an inventor, neither the '894 patent nor the sale of its antecedent application to Greatbatch precluded Daneshvar from patenting his own inventions. Summary judgment for Defendants is warranted on the claim.

D. Unjust Enrichment (Count III)

Under Michigan law, unjust enrichment has two elements: "(1) receipt of a benefit by the defendant from the plaintiff, and (2) an inequity resulting to plaintiff from defendant's retention of the benefit." *Bellevue Ventures, Inc. v. Morang-Kelly Inv., Inc.*, 302 Mich. App. 59, 64, 836 N.W.2d 898, 901 (2013). According to Daneshvar, when NeuroNexus was acquired by Greatbatch, Defendants benefitted from a higher sale price because of the "intellectual property which included Daneshvar's disclosures[.]" ECF 20-1, PgID 159. Daneshvar did not share in any of those sales proceeds; he argues that Defendants' sole retention of the proceeds was therefore inequitable.

In considering whether an unjust enrichment claim is preempted, the Federal Circuit has distinguished between two circumstances. In one, a plaintiff may allege that a defendant only secured a patent by illicitly obtaining information; in the other, a plaintiff alleges that he, too, contributed to an invention and therefore seeks his "fair share." See

Tavory v. NTP, Inc., 297 F. App'x 976, 983 (Fed. Cir. 2008). The latter case is preempted, but the former is not. *Id.*

Daneshvar's claim is of the unpreempted version. According to him, Defendants acquired his ideas improperly—by breaching a fiduciary duty. But like the breach of fiduciary duty claim, it fails because he is not an inventor of the '894 patent.

Another case involving patents arising from university research is illustrative. In the *Cyanamid* line of cases, two university doctors developed a reformulation of a multivitamin sold by the defendant corporation Cyanamid. *Univ. of Colorado Found., Inc. v. Am. Cyanamid*, 880 F. Supp. 1387 (D. Colo. 1995) (*Cyanamid I*). They disclosed a confidential, pre-publication draft of their findings to Cyanamid, which then patented the idea without naming the doctors as co-inventors. The doctors and the university sued. On appeal, the Federal Circuit distinguished the plaintiffs' unjust enrichment claim as "spring[ing] not from an attempt to enforce intellectual property rights, but instead from [the defendant's] alleged wrongful use of the [plaintiffs'] research results" and thus concluded that federal patent law did not preempt the claim. *Cyanamid IV*, 196 F.3d at 1371–72. But the claim hinged on a finding of inventorship and on remand, the doctors were found to be inventors of the patent at issue. *Id.* at 1374; *Univ. of Colorado Found., Inc. v. Am. Cyanamid Co.*, 105 F. Supp. 2d 1164, 1185 (D. Colo. 2000).

Unlike the *Cyanamid* plaintiffs, Daneshvar is not an inventor of the '894 patent. He therefore had no claim to the benefits Defendants received when Greatbatch acquired the patent. Because Daneshvar is not an inventor of the '894 patent, it is not inequitable for Defendants to retain the benefits derived from the patent. Summary judgment for Defendants on the claim is warranted.

III. Kipke's Counterclaim for Defamation

One final matter remains: Kipke's counterclaim for defamation. Kipke alleges that Daneshvar said orally and in writing that Kipke committed "fraud, intellectual property theft, failing to disclose a conflict of interest, retaliation, and dishonesty." ECF 17, PgID 132. Kipke argues that he is entitled to summary judgment on this claim because the statements were defamation per se.

There are four elements to defamation:

- (1) a false and defamatory statement concerning the plaintiff,
- (2) an unprivileged publication to a third party,
- (3) fault amounting at least to negligence on the part of the publisher, and
- (4) either actionability of the statement irrespective of special harm (defamation per se) or the existence of special harm caused by the publication (defamation per quod).

Burden v. Elias Bros. Big Boy Restaurants, 240 Mich. App. 723, 726 (2000). Defendants argue only for defamation per se and present no evidence of special harm, so the Court is left to determine whether the alleged statements are actionable regardless of special harm.

Defamation per se is a narrow cause of action. "[A]t common law defamation per se typically concerns issues of chastity, commission of a crime[,] loathsome disease, or disparagement of one's profession or business." *Nehls v. Hillsdale Coll.*, 65 F. App'x 984, 990–91 (6th Cir. 2003). When Michigan codified defamation, it eliminated the disparagement of one's profession as grounds for defamation per se, but retained the rule regarding allegations of a crime. See Mich. Comp. Laws § 600.2911(1), 2(a); *Lakin v. Rund*, 894 N.W.2d 53 (Mich. 2017) (Markman, C.J., concurring) (recognizing that Michigan's codification "neither explicitly nor implicitly abrogated the common-law rule for defamation per se relating to an allegation of a crime."); *and compare Heike v. Guevara*, 654 F. Supp. 2d 658, 676 (E.D. Mich. 2009) (questioning whether statements concerning

one's profession are actionable) *with George v. Senate Democratic Fund*, No. 253202, 2005 WL 1027107, at *2 (Mich. Ct. App. May 3, 2005) (recognizing that statements concerning one's business or profession are not actionable as defamation per se, except under narrow grounds provided by the statute). Although the holdings of Michigan courts have been mixed, the prevailing rule is that words constitute defamation per se if the invoked crime involves moral turpitude or would subject the person to an infamous punishment. *Lakin v. Rund*, 318 Mich. App. 127, 896 N.W.2d 76, 81 (2016), *appeal denied*, 894 N.W.2d 53 (Mich. 2017).

Neither party's brief addresses whether Daneshvar's words could actually constitute defamation per se—that is, whether they impute crimes which involve moral turpitude or would subject Kipke to an infamous punishment. Kipke merely concludes that because Daneshvar accused him of fraud and extortion, he has an action for defamation per se. Daneshvar's response brief raises several arguments to distinguish the contents of the website, but does not address that preliminary question. But because the parties disagree on whom Daneshvar's statements concerned, and whether they are even accusatory to begin with, the Court will first address Daneshvar's arguments and then determine whether the statements satisfy the moral-turpitude and infamous-punishment requirements.

Kipke's defamation allegations revolve around a website created by Daneshvar. The website, titled "Defending My Thesis," chronicled Daneshvar's experiences concerning his "Inventorship Dispute." ECF 135-19, PgID 8429. To tell his story, Daneshvar provided a timeline of events, copies of emails, links to University information, commentary, and eventually the complaint that initiated this case. One section on the website was titled, "Fraud, Coverup, and Hush \$," *id.* at 8433, while another was titled, "THEFT - EXTORTION

- OBSTRUCTION & Entrepreneurship" with the subtitle, "Two wrongs don't make a right . . . neither do three," *id.* at 8429. That section begins with the following paragraph: "If you know my story of entrepreneurship, then you know what I'm talking about. If you don't, then let this be a brief overview. In order to protect the identity of my former-advisor, let's refer to him as something vague like 'DRK' to avoid damaging his pristine character." *Id.*

Daneshvar used the "DRK" moniker throughout the website, but there were several clues for even a mildly curious visitor to discover who DRK was. For instance, Daneshvar noted that DRK was a member of the University's Conflict of Interest Committee and included a link to the University's webpage that listed the committee's 14 members along with each member's educational discipline. *Id.* at 8430, 8434. Only two of the listed members had the initial's "DK," and of those, only one was identified with engineering: Daryl Kipke. *Id.* Daneshvar also disclosed that "DRK has a U of M spinout company (NNT) that commercializes neural electrodes [which] was acquired for \$12 Million[.]" *id.* at 8429, while another page disclosed that "NNT" is NeuroNexus, *id.* at 8445. And when Daneshvar posted the front page of the complaint to the website, he did not redact the listed defendants: Daryl R. Kipke and NeuroNexus Technologies. *Id.* at 8428.

Daneshvar responds to Kipke's motion for summary judgment with several arguments. For instance, he argues that "the alleged defamatory words are simply included in a subheading unconnected to a specific accusation or individual" and suggests that there is an issue of fact as to whether the statements actually referred to Kipke. See ECF 140, PgID 8976. He also argues that Kipke failed to plead the defamatory words with the required specificity and that, notwithstanding the headings proclaiming fraud, the website "does not, for example, state Kipke *engaged* in criminal extortion or theft." *Id.* And finally,

he suggests that, because the website is a blog, the statements within should be considered "pure opinion" rather than "actual, provable fact." *Id.* at n.108.

The distinctions are unavailing. Unlike the case cited by Daneshvar, this one is not a situation in which a group has been defamed and readers of the published statements are left to guess to whom among the group the publisher actually referred. *Cf. Action Auto Glass*, 2001 WL 1699205, at *7 (recognizing that statements about large groups are not actionable). For one, Daneshvar referred to the specific deeds of DRK—an individual person—not, for instance, departmental advisors as a group. Further, Daneshvar admitted that his less-than-cryptic "DRK" was referring to Kipke, so there is no mystery as to whether Daneshvar made statements "concerning" Kipke. *See, e.g.*, ECF 135-10, PgID 8267. Finally, the veil Daneshvar used to conceal Kipke's identity was a thin one; any reader could have looked past it with ease to discover who DRK really was. *See* ECF 135-10, PgID 8265–66 (wherein Daneshvar concedes that, once he posted the caption of the complaint, it became easier for visitors to the site to determine that DRK was Kipke).

Daneshvar's argument about specificity also fails. Contrary to his assertion, the defamatory words were not "simply included in a subheading unconnected to a specific accusation or individual." ECF 140, PgID 8976. Rather, he actually quoted the legal standard for fraud and then recited its elements—one by one—and explained how each element was satisfied by "DRK's" actions. ECF 135-19, PgID 8443. His accusation of theft was also precise:

- October 2007 - DRK submits a provisional patent application encompassing my (PP) ideas via his company, NNT
- January 2012 - I discover that my name is no longer on a different patent submission (BAMNI) through U of M although my ideas still are.

Isn't this called THEFT?

Id. at 8433. Daneshvar's argument is correct in one respect: in the pages provided to the Court, Daneshvar did not allege that Kipke specifically committed extortion—that accusation was reserved for Kipke's department alone.

Daneshvar asserts that "reasonable minds could differ as to the alleged defamatory words' meaning," ECF 140, PgID 8977, but provides no alternative meanings. In his deposition, Daneshvar explained that by phrasing his statement in the form of a question, he intended to avoid an "explicit defamatory statement[.]" ECF 135-10, PgID 8263. But statements are to "be viewed in context," *Kevorkian v. Am. Med. Ass'n*, 237 Mich. App. 1, 7, 602 N.W.2d 233, 237 (1999), and no visitor to the website would take Daneshvar's "question" as an invitation for clarification or mere hyperbole. The argument fails.

Finally, Daneshvar's passing assertion that the website was mere opinion is without merit. Although Daneshvar cites a Michigan Court of Appeals case for the proposition "that blogs are generally regarded as containing statements of pure opinion rather than statements or implications of actual, provable fact," ECF 140, PgID 8976, the case concludes quite the opposite. As the court explained, "[t]o be considered defamatory, statements must assert facts that are provable as false" but "[e]ven statements couched in terms of opinion may often imply an assertion of objective fact and, thus, can be defamatory. The dispositive question . . . is whether a reasonable fact-finder could conclude that the statement implies a defamatory meaning." *Ghanam v. Does*, 303 Mich. App. 522, 545, 845 N.W.2d 128, 143 (2014) (internal citations and quotation marks omitted). The portions of the *Ghanam* opinion cited by Daneshvar refer to anonymous posts in an electronic bulletin board—a far cry from the exposé website in this case. Taken as a

whole—or even in page-by-page isolation—Daneshvar's writings are unambiguously assertions of provable facts and defamatory in nature.

But were they defamatory *per se*? Again, the question is whether Daneshvar accused Kipke of a crime of moral turpitude or one that would otherwise subject Kipke to an infamous punishment. Kipke's counterclaim alleges a laundry list of Daneshvar's accusations: "fraud, intellectual property theft, failing to disclose a conflict of interest, retaliation, and dishonesty."² ECF 17, PgID 132. Some of those are crimes, but some are not. Fraud is a crime, but criminal fraud is distinct from civil fraud. Daneshvar—quite precisely—accused Kipke of civil fraud. See ECF 135-19, PgID 8443. As to fraud, then, Daneshvar did not accuse Kipke of a *crime* of moral turpitude. *Cf. Action Auto Glass v. Auto Glass Specialists*, No. 1:00-CV-756, 2001 WL 1699205, at *5 (W.D. Mich. Aug. 21, 2001) (determining whether a statement alleged criminal or civil fraud based upon how a reasonable person would understand it).

And though Daneshvar's other statements accuse Kipke of turpitudinous behavior, they do not allege crimes. Theft is a crime, but intellectual-property theft is not. More specifically, larceny is a crime but the patenting of another's ideas is not larceny. See Mich. Comp. Laws § 750.356 (listing the types property requisite to commit larceny). Kipke cites neither statute nor case law for the alleged crime of intellectual property theft as Daneshvar described it on the website, see ECF 135-19, PgID 8433, and the Court has no duty to identify what statute might apply. See *Nehls v. Hillsdale Coll.*, 65 F. App'x 984, 991 (6th Cir. 2003) (rejecting, on appeal, plaintiff's defamation claim based on a fraud accusation for failure to identify the applicable statute).

² The counterclaim also mentions "extortion," but as the Court has already noted, Daneshvar lobbed this accusation at the Biomedical Engineering Department, not Kipke.

The criminality of Kipke's other defamation claims is likewise vague. "Dishonesty" and "retaliation," by themselves, are not crimes, and neither is the mere failure to disclose a conflict of interest. Without more, the accusations—and Kipke's pleading—fail to impute that Kipke committed a crime of moral turpitude. Accordingly, the Court will deny Defendants' motion as it relates to Kipke's counterclaim.

ORDER

WHEREFORE, it is hereby **ORDERED** that Defendants' Motion for Summary Judgment [134] is **GRANTED IN PART AND DENIED IN PART**.

IT IS FURTHER ORDERED that Defendant Kipke shall **SHOW CAUSE** in writing within 14 days of the date of this order why his counterclaim should not be dismissed with prejudice for failure to state a claim upon which relief can be granted.

SO ORDERED.

s/Stephen J. Murphy, III
STEPHEN J. MURPHY, III
United States District Judge

Dated: July 19, 2017

I hereby certify that a copy of the foregoing document was served upon the parties and/or counsel of record on July 19, 2017, by electronic and/or ordinary mail.

s/David P. Parker
Case Manager