IN THE UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF OHIO EASTERN DIVISION

JOSEF MAATUK,)	Case No. 1:16-CV-03023
)	
Plaintiff,)	
)	MAGISTRATE JUDGE
v.)	THOMAS M. PARKER
)	
EMERSON ELECTRIC, INC., et. al.,)	
)	MEMORANDUM OF OPINION AND
Defendants.)	<u>ORDER</u>
)	

I. Introduction

Plaintiff, Joseph Maatuk, sued Therm-O-Disc ("TOD")¹ after he learned that the U.S. Patent and Trademark Office granted TOD U.S. Patent No. 7,775,105 (the "105 patent"). Maatuk alleged that he should have been a co-inventor on the '105 patent, because it was based on designs and trade secrets that he disclosed to TOD, and TOD employees Prasad Khadkikar and Bernd Zimmermann, while TOD was determining whether to license a multi-function liquid sensor that he invented (the "Sensor"). Maatuk's complaint sought: (1) correction of inventorship, under 35 U.S.C. § 256; (2) \$500,000 or more in damages for TOD's misappropriation of trade secrets; and (3) \$500,000 or more in damages for TOD's unjust

¹ Maatuk also sued Emerson Electric, Inc., and TOD employees Prasad Khadkikar and Bernd Zimmermann. ECF Doc. 1, Page ID# 1. However, the District Court for the Central District of California dismissed Emerson, Khadkikar, and Zimmermann as defendants before transferring Maatuk's case to this court, because: (1) Maatuk's complaint did not state a claim against Emerson; and (2) the court lacked personal jurisdiction over Khadkikar or Zimmermann. ECF Docs. 12, 13, and 28.

enrichment. ECF Doc. 1, Page ID# 11–14. In his correction of inventorship claim, Maatuk stated that he:

was damaged by the fact that he was not listed as a co-inventor of Patent 7,775,105 when the application for this patent was filed. The loss of potential for recognition, the loss of ability to practice the invention, and loss of licensing revenue, and also the loss of the ability to "swear back" the invention of Patent 7,775,105 as a reference with relation to rejections under 35 U.S.C. § 103, relating to other patent applications, and loss of the ability to claim continuity from the application for Patent 7,775,105 to other patent applications, are all ways in which Dr. Maatuk was damaged by [TOD's] legally unsound decision not to list Dr. Maatuk as a co-inventor of the invention of Patent 7,775,105.

Id. at 12. Maatuk stated that he was "entitled to have Patent 7,775,105 corrected to list Dr. Maatuk as an inventor of [the '105] patent." *Id.* Further, Maatuk sought to recover his legal costs and "such other relief . . . as the Court should deem to be fair and equitable." *Id.* at 14–15.

On March 17, 2017, TOD moved: (1) for summary judgment on all Maatuk's claims, based on laches, the statute of limitations, collateral estoppel, and equitable estoppel; and (2) judgment on the pleadings on Maatuk's common law unjust enrichment claim, based on preemption under the Ohio Uniform Trade Secret Act. ECF Docs. 47–48. On January 24, 2018, this court: (1) denied TOD summary judgment on Maatuk's correction of inventorship claim; (2) granted TOD summary judgment on Maatuk's misappropriation of trade secrets and unjust enrichment claims; and (3) alternatively granted TOD judgment on the pleadings on Maatuk's common law unjust enrichment claim. ECF Docs. 66 and 69.

TOD now seeks summary judgment on Maatuk's correction of inventorship claim, asserting that Maatuk is not entitled to a correction of inventorship under 35 U.S.C. § 256, because he did not contribute to the conception of the invention in the '105 Patent. Additionally, TOD contends that even if, Maatuk proved he contributed to the invention, he is not entitled to

any damages. Maatuk and TOD consented to magistrate judge jurisdiction on May 30, 2018. ECF Docs. 74 and 76.

Because Maatuk has failed to produce evidence sufficient to create a genuine issue of material fact that he contributed to the invention described in the '105 Patent, and TOD is entitled to judgment as a matter of law on Maatuk's correction of inventorship claim, TOD's motion for summary judgment must be **GRANTED**.

II. Facts

A. Maatuk's and TOD's 1997–1999 Discussions

The following facts are undisputed or established by the Rule 56 evidence. In 1997, Maatuk, doing business as Max-Em Engineering, and TOD entered into a confidentiality agreement, so that TOD could evaluate Maatuk's multi-functional liquid sensor technology (the "Sensor") for a potential licensing agreement. ECF Docs. 66 and 88-1, Page ID# 1094, 1592–94. Between 1997 and 1999 Maatuk corresponded with TOD employees Prasad Khadkikar and Bernd Zimmermann, and provided TOD information regarding the Sensor, including providing TOD with a sample probe, prototype schematics for the Sensor, and information on constructing prototypes of the Sensor. ECF Docs. 87-3–87-4 and 88-2–88-4, Page ID# 1479, 1487, 1596– 1624. During that time, Maatuk did not discuss or disclose to TOD, Khadkikar, or Zimmermann any trade secrets related to turbidity sensing. ECF Doc. 87-5, Page ID# 1493–98.

Maatuk communicated with TOD employees, including Khadkikar and Zimmermann, via letters, email, and phone between 1997 and 1999. In a December 1997 letter, Maatuk stated that he sent a sample piece of his liquid level sensing probe and stated that it was made by laminating one layer with copper traces to a mylar layer. ECF Doc. 88-2, page ID# 1596. He stated that the

probe could also be made using vacuum deposition, screen printing, a mold, or a combination of those methods. *Id*.

In a February 1998 letter, Maatuk thanked Zimmermann for setting a meeting between him and TOD and expressing interest in a "multi-function sensor." ECF Doc. 88-4, page ID# 1622. Maatuk attached to his letter infringement search results, differentiating his technology from patents describing other multi-function sensor technology. *Id.* He also attached the results from three experiments, studying signal strength in probes using different size heaters. *Id.* at 1623. Maatuk noted that his studies showed that he could reduce electromagnetic interference by using low impedance heaters, a low-cost capacitor, or fiber-optic technology. *Id.* at 1622, 1624.

In a March 27, 1998, letter, Zimmermann identified three critical variables for probe testing (heater wire size, film type, and probe coating), and asked Maatuk to review the proposed design of experiment. ECF Doc. 88-2, Page ID# 1605–06. Zimmermann specifically noted that he did not include junction spacing or copper trace width as variables. *Id.* at 1606. Zimmermann stated that each probe in the experiment would be seven inches long, have five traces, and have junctions spaced one inch apart. *Id.* at 1605.

In a March 29, 1998, letter, Maatuk noted that he had reviewed Zimmermann's proposal for electromagnetic interference testing and signal noise reduction. ECF Doc. 88-3, Page ID# 1611–12. Maatuk noted that, if Zimmermann placed the junctions in the seven-inch probe one inch apart, the probe would have seven copper traces instead of five. *Id.* at 1611. Maatuk noted that additional studies and developments were needed to determine how to accurately read liquid levels for a six-inch probe with 5 traces, and that further work was needed in order to use the trace and heater connections as thermocouple joints. *Id.* at 1612.

On April 8, 1998, TOD account manager David Connell wrote an internal e-mail, stating that a client was interested in Maatuk's multiple thermocouple liquid level sensor, if it could "measure liquid level, liquid temperature, and vapor temperature." ECF Doc. 88-2, page ID# 1600. Connell noted that the client was also interested in measuring fuel identification and vapor leakage, as well as potentially adapting the technology to measure brake fluid, transmission fluid, coolant, and windshield wiper fluid. *Id.* Connell also noted that the client used tin traces, rather than copper traces, in its fuel tanks to avoid corrosion. *Id.* On April 9, 1998, Connell sent a follow-up letter to the client, stating that: (1) TOD was looking at manufacturing a level sensing device, which could also measure liquid temperature, vapor temperature, vapor leakage, and liquid type; and (2) the device would also self-calibrate, have no moving parts, be small and flexible, and be "cost advantageous." *Id.* at 1601. Connell also sent an e-mail to Maatuk, stating that the client was interested in his liquid level sensor and wanted to meet to discuss its potential. *Id.* at 1602.

In an April 19, 1998, letter to Khadkikar, Maatuk stated that he would adapt his multi-function liquid level sensor technology to measure liquid level for seven types of fuel, fluid temperature, and fuel thermal properties. *Id.* at 1597. He stated that TOD should consider using vacuum deposition and lamination to produce probes for testing. *Id.* at 1598. Maatuk noted that the multi-function technology could measure, fuel, engine oil, coolant, and brake fluids, and that developing technology to measure vapor leakage would cost an additional \$100,000 and take 6 to 12 months. *Id.* at 1599.

In a June 17, 1998, letter to Maatuk, Zimmermann stated that TOD was in the process of specifying the liquid level sensor probes to a prototype supplier; however, the supplier could not connect a constantan strip to the probe. *Id.* at 1603. Zimmermann stated that he believed the

constantan strip could be attached to the copper traces using "special welding techniques." *Id.* With his letter, Zimmermann attached a schematic drawing for the liquid sensor probe. *Id.* at 1603–04.

In a June 21, 1998 letter to Zimmermann, Maatuk stated that the drawing should note that the design was confidential and proprietary to Max-Em Engineering, and that Max-Em Engineering would own any technology improvement that might be discovered during testing. Id. at 1607. Further, Maatuk requested additional information on how Zimmermann planned to attach the "Constantine wire to the tip of the copper traces," how Zimmermann would insulate the sides of the heater, the top thin coating that Zimmermann planned to sue, and the plastic that the prototype supplier would use. Id. Maatuk noted that he would give Zimmermann additional suggestions on end leakages from the probe during a phone call. Id. at 1608. Maatuk sent another letter on June 22, 1998, noting that he spoke with Zimmermann over the phone, and that Zimmermann would enter a non-disclosure agreement with the supplier and change Therm-O-Disc Inc. "Proprietary" to "Confidential" on the drawing. ECF Doc. 88-3, Page ID# 1614. Maatuk also noted that he provided TOD with confidential information not in the public domain, including "how to use a heater wire as a common wire and measure liquid properties."² Id. Zimmermann confirmed the change in wording on the drawing and the execution of a confidentiality agreement with the supplier in a June 24, 1998, letter. ECF Doc. 88-2, Page ID# 1609.

On April 30, 1999, Zimmermann sent an e-mail to Maatuk, asking for input on a data set containing test results for use of a liquid level sensor in a fuel compressor. ECF Doc. 88-3, Page

² Maatuk's letter indicates that he listed other confidential information that he provided TOD; however, Maatuk provided only the first and last pages of what appears to be a four-page letter. *See* ECF Doc. 88-3, Page ID# 1614–15 (jumping from page 39 to page 42).

ID# 1618. Zimmermann noted that the liquid level in the compressor was tested in a range from "full" to "empty" (approximately 6 cm), and that the spacing for the four thermocouple junctions in the sensor was approximately 15 mm. *Id.* Zimmermann stated that he was concerned that output from each thermocouple changed under varying operating conditions. *Id.* Zimmermann also noted that the data set was confidential to TOD and TOD's client.

While Maatuk was discussing licensing the Sensor to TOD, the U.S. Patent and Trademark Office ("USPTO") awarded him two patents for liquid sensor technology. ECF Docs. 87-7–87-8, Page ID# 1510–30; *see also* ECF Doc. 87-3–87-4, Page ID# 1479, 1487. On March 24, 1998, the USPTO issued U.S. Patent No. 5,730, 026, titled "Microprocessor-Based Liquid Sensor and Ice Detector" ("the '026 Patent"). ECF Doc. 87-7, Page ID# 1510–18. On June 1, 1999, the USPTO issued U.S. Patent No. 5,908,985, also titled "Microprocessor-Based Liquid Sensor and Ice Detector" ("the '985 Patent"). ECF Doc. 87-8, Page ID# 1520–30.

In late July or August 1999, TOD informed Maatuk that it decided not to license his liquid sensor technology. ECF Docs. 15-1 and 87-4, Page ID# 241, 1487. Thereafter, Khadkikar and Zimmermann did not communicate further with Maatuk, except about this lawsuit and a prior lawsuit between Maatuk and TOD. ECF Docs. 87-3–87-4, 87-12, and 88-3, Page ID# 1479, 1487, 1558–59, 1616–18.

B. Invention of the Multi-Function Sensor

On December 10, 2003, Khadkikar and Zimmermann jointly conceived of a multifunction sensor that combined and integrated a turbidity sensor with a liquid level sensor (the "multi-function sensor"). ECF Docs. 87-3–87-4, Page ID# 1479, 1487. On April 15, 2004, Khadkikar prepared a written record documenting the conception of the multi-function sensor. ECF Docs. 87-3 and 87-9, Page ID# 1479–80, 1532–34. On April 21, 2004, Khadkikar and

Zimmermann applied for a provisional patent for the multi-function sensor. ECF Docs. 1 and 87-3–87-4, Page ID# 27, 1480, 1487. On March 9, 2005, Zimmermann prepared a TOD invention disclosure form, disclosing the invention of a "multi-function liquid level sensor," which integrated a turbidity sensor into a liquid level sensor probe. ECF Doc. 87-8 and 87-10, Page ID# 1488, 1536–40. Zimmermann stated that the multi-function sensor could be "used in dishwasher and washing machine applications, therefore requiring only a single perforation in the bottom of the sump/tub." ECF Doc. 87-10, Page ID# 1536.

On August 17, 2010, the USPTO granted TOD the '105 Patent and listed Khadkikar and Zimmermann, as joint inventors. ECF Doc. 1, Page ID# 17. The '105 patent describes a multi-function sensor that "incorporates a fluid level sensor module [or a fluid flow rate sensor], a turbidity sensor module, a temperature sensor module, and a pressure sensor module." ECF Doc. 1, Page ID# 17. The patent states that "[a] turbidity sensor module is . . . integrally included on the multi-function sensor," and every claim in the patent recites a multi-function sensor combining a turbidity sensor with a fluid level sensor or a fluid flow rate sensor. *Id.* at 17, 33–34. The '105 patent discloses that each of the sensor modules integrated into the multi-function sensor were commercially available or already known in the prior art and previously published patent documents. *Id.* at 28–33. Specifically, the patent stated that: (1) the liquid level sensor module was described in U.S. Patent No. 6,546,796 and U.S. Patent No. 6,862,932; (2) the turbidity sensor module was commercial available from Fairchild Semiconductor and Optek Technology, Inc.; (3) the pressure sensor module was described in U.S. Patent No. 6,546,796; (4) the temperature sensor module was commercially available from

Panasonic; and (5) the fluid flow rate sensor module was described in U.S. Patent Application No. 10/963,750.³ *Id.*

Maatuk never disclosed to Khadkikar and Zimmermann the idea of integrating a turbidity sensor with a liquid level sensor or fluid flow sensor into a single sensor package, and he also did not disclose the way the '105 patent measured turbidity and flow rate. ECF Docs. 87-3–87-5, Page ID# 1481, 1489, 1493–95. In his deposition, Maatuk stated that Khadkikar and Zimmermann never disclosed to him that they were working on a multi-function sensor that included a fluid flow sensor or a turbidity sensor. ECF Doc. 87-5, Page ID# 1498. Maatuk learned about Khadkikar and Zimmermann's efforts to invent a multi-function sensor integrating a turbidity sensor with other sensors when he learned about the '105 patent in October 2014. *Id.* at 1497–98. In their declarations, Khadkikar and Zimmermann stated that: (1) they conceived of the multi-function sensor at least four years after their last contact with Maatuk; (2) they did not collaborate with Maatuk in conceiving the multi-function sensor; and (3) Maatuk did not participate in or contribute to the conception of the multi-function sensor. ECF Docs. 87-3 and 87-4, Page ID# 1481, 1489.

In a December 21, 2018, declaration, Maatuk stated that he conceived of a "multifunction liquid sensor that [could] measure fluid level, temperature, and pressure leakage" before contacting TOD in 1997. ECF Doc. 88-7, Page ID# 1657. He asserted that he made several contributions to the '105 patent. ECF Doc. 88-7, Page ID# 1659–61. Specifically, Maatuk stated that the claims in the '105 patent incorporate several elements of his designs that are: (1) shown in a diagram attached to a June 1998 letter from Zimmermann to Maatuk, showing the

³ TOD owned U.S. Patent Nos. 6,546,796 and 6,862,932. ECF Docs. 47-6 and 47-16. TOD also owned U.S. Patent Application No. 10/963,750, which the USPTO granted as U.S. Patent No. 7,333,899 on February 19, 2008. ECF Doc. 87-11, Page ID# 1542.

schematics for a liquid level sensor probe; and (2) recited in a March 1998 letter from Zimmermann, describing the critical variables in the design of Maatuk's probe so that a prototype could be constructed for testing. ECF Doc. 88-7, Page ID# 1659–61; *see also* ECF Doc. 88-2, Page ID# 1604–06. He stated that such elements included the thermocouple junction spacing described in claims 1 and 2, the electric circuit and heat source spacing described in claim 5, the mounting of a fluid level sensor on a substrate that was electrically insulating the heater and thermocouples of the fluid level sensor in claim 6, the different coatings of the multifunction sensor in claim 7, the properties of the substrate for mounting the plurality of the first thermocouple and the placement of the heat source in claim 8, the placement of the traces for the first and second thermocouples and heaters in claim 9, the multi-function sensor comprised of a temperature sensor and a pressure sensor module wherein the temperature sensor module comprises a thermocouple junction and the pressure sensor module comprises a thermocouple junction in claim 10. ECF Doc. 88-7, Page ID# 1659–61.

C. Practice of the '105 Patent

TOD claims that it never practiced the '105 patent. ECF Doc. 87-1, Page ID# 1459. In his deposition, TOD representative Ralph Bishop testified that TOD never manufactured or sold a multi-function sensor covered by the '105 patent, licensed the '105 patent, or enforced the '105 patent against a third party. ECF Doc. 87-6, Page ID# 1506–08.

In his response brief, Maatuk asserts that TOD practiced the '105 patent by conducting market research in an attempt to commercialize the multi-function sensor. ECF Doc. 88, Page ID# 1580–82. Specifically, Maatuk points to several TOD documents, including: (1) a 1998 market report by Frost & Sullivan, Inc., predicting that the U.S. market for fuel level sensors would grow from 12.9 million units with a value of \$38.8 million in 1992 to 15.3 million units

with a value of \$46 million in 2002; (2) an undated TOD quotation form addressed to Copeland Corporation and stating that TOD would sell oil level sensors at prices ranging from \$25 per unit for 10,000 units to \$15 per unit for 100,000 units; (3) a March 23, 2001, consulting work bill for modeling and studying a multiple thermocouple liquid level sensor ("MTLLS"); (4) a May 1999 proposal noting that TOD requested a technical review to determine suitable materials for the substrate/coating/encapsulation system for a MTLLS in a compressor environment; (5) an October 1996 TOD project request to develop improved flow rate and water level sensor systems for washing machines, which was terminated in January 1998 due to lack of client interest; (6) a November 1998 TOD project request to develop an MTLLS for measuring oil level inside Copeland's specter compressor, which Copeland request be placed on hold; (7) a June 2003 TOD project request to adapt the MTLLS for dishwasher applications, which was closed due to customer disinterest; (8) a June 2009 TOD project request to determine whether TOD's liquid level sensor could differentiate between liquid and powder detergents; and (9) a June 2009 TOD project request to determine whether TOD's liquid level sensor could monitor the water level and temperature in a horizontal washer. ECF Doc. 88-5, Page ID# 1626-41.

D. Expiration of the '105 Patent

On May 7, 2018, and August 10, 2018, TOD sent correspondence to Maatuk informing him that the maintenance fee for the '105 patent was due on August 17, 2018, as TOD did not intend to pay the maintenance fee. ECF Docs. 87-1 and 88, Page ID# 1460, 1581. TOD notified Maatuk that he could pay the maintenance fee to keep the '105 patent from lapsing, even though he was not listed as an inventor on or owner of the '105 patent. ECF Docs. 87-1 and 88, Page ID# 1460, 1581. Maatuk states in his response brief that he attempted to pay the \$3,760 maintenance fee; however, he sent only \$3,750. ECF Doc. 88, Page ID# 1581–82. Maatuk

asserts that the USPTO notified him of the error only after the '105 patent lapsed and said that the '105 patent could only be judicially re-instated. *Id.* at 1582.

III. Law and Analysis

A. Summary Judgment Standard

Summary judgment is proper when "the movant shows that 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); Akzo Nobel Coatings, Inc. v. Dow Chem. Co., 811 F.3d 1334, 1338–39 (Fed. Cir. 2016). The moving party must demonstrate the "basis for its motion, and identify[] those portions of the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, which it believes demonstrate the absence of a genuine issue of material fact." Celotex Corp. v. Catrett, 477 U.S. 317, 324 (1986) (quotation omitted). The nonmoving party may not simply rely on his pleadings, but "must set forth specific facts showing that there is a genuine issue for trial." Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 250 (1986) (quotation omitted). A reviewing court must determine whether the evidence that the nonmoving party relies upon "presents 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." Id. at 251-52. In evaluating the evidence presented on a summary judgment motion, courts must draw all reasonable inferences in favor of the nonmoving party. Id. at 255. Nonetheless, a court need not accept unsupported or conclusory statements as true. See TechSearch, LLC v. Intel Corp., 286 F.3d 1360, 1372 (Fed. Cir. 2002) ("[U]nsupported or conclusory averments are insufficient to avoid summary judgment.").

B. Liberal Construction for *Pro Se* Litigants

Pleadings by *pro se* litigants are liberally construed and held to less stringent standards than formal pleadings by lawyers. *Ottah v. Fiat Chrysler*, 884 F.3d 1135, 1141 (Fed. Cir. 2018). Nevertheless, there are limits to the liberal construction *pro se* pleadings may receive. A *pro se* litigant must state a plausible claim for relief and cannot rely on conclusory allegations. *Id.* (citing *Walker v. Schult*, 717 F.3d 119, 124 (2d Cir. 2013)); *McZeal v. Sprint Nextel Corp.*, 501 F.3d 1354, 1359 n.2 (Fed. Cir. 2007). Further, the court may not: (1) rewrite a complaint to include claims that were never presented, *Barnett v. Hargett*, 174 F.3d 1128 (10th Cir. 1999); (2) construct the plaintiff's legal arguments for him, *Small v. Endicott*, 998 F.2d 411 (7th Cir. 1993); (3) "conjure up unpled allegations," *McDonald v. Hall*, 610 F.2d 16, 19 (1st Cir. 1979); or (4) create a claim for Plaintiff, *Clark v. Nat'l Travelers Life Ins. Co.*, 518 F.2d 1167, 1169 (6th Cir. 1975). *See also Beaudett v. City of Hampton*, 775 F.2d 1274, 1278 (4th Cir. 1985) (noting that holding otherwise would "transform the district court . . . to the improper role of an advocate seeking out the strongest arguments and most successful strategies for a party").

C. Mootness

District courts must *sua sponte* inquire into their jurisdiction whenever jurisdiction may be lacking. *Special Devices, Inc. v. OEA, Inc.*, 269 F.3d 1340, 1343 (Fed. Cir. 2001). A case is moot, and therefore federal courts lack jurisdiction over it, when the parties lack a legally cognizable interest in the outcome. *Humane Society of the U.S. v. Clinton*, 236 F.3d 1320, 1331 (Fed. Cir. 2001). The expiration of a patent does not render the issue of inventorship moot, as expired patents are not considered as having never existed and continue to have value beyond the expiration point. *Cf. Genetics Inst., LLC v. Novartis Vaccines & Diagnostics, Inc.*, 655 F.3d 1291, 1299 (Fed. Cir. 2011) (stating that a litigant seeking rights in an expired patent, if

successful, could potentially bring an infringement action up to six years after the patent's expiration). Even if the right to enforce the '105 patent would evade Maatuk if he is successful in his correction of inventorship claim, his claim is not moot because there is a legally cognizable reputation interest in being named an inventor to a patent. *Cf. Shukh v. Seagate Tech., LLC*, 803 F.3d 659, 663 (Fed. Cir. 2005) (stating that an inventor omitted from a patent may recover for reputational injury). Furthermore, the '105 patent's expiration does not moot Maatuk's case, because Maatuk could petition the Director of the USPTO to accept a delayed payment for the maintenance fee on the expired '105 patent. *See* 37 C.F.R. § 1.378 ("The Director may accept the payment of any maintenance fee due on a patent after expiration of the patent if, upon petition, the delay in payment of the maintenance fee is shown to the satisfaction of the Director to have been unintentional."). Accordingly, this court has jurisdiction to hear Maatuk's correction of inventorship claim notwithstanding the '105 patent's expiration.

D. Correction of Inventorship

TOD argues that Maatuk has not produced sufficient evidence to show that he was a joint inventor of the multi-function sensor in the '105 patent. ECF Docs. 87 and 87-1, Page ID# 1443–45, 1467–70. Specifically, TOD contends that Maatuk cannot show that he contributed to Khadkikar and Zimmermann's 2003 conception of the multi-function sensor, because: (1) Maatuk did not communicate with TOD, Khadkikar or Zimmermann after 1999; (2) he never disclosed to anyone at TOD the idea of integrating a turbidity sensor with a liquid level sensor or fluid flow sensor into a single sensor package; and (3) he did not know about Khadkikar and Zimmermann's work on a multi-function sensor that included a turbidity sensor and or flow sensor, until he learned of the '105 patent in October 2014. *Id.* at 1445, 1467–69. TOD also asserts that, even if the '105 patent included Maatuk's liquid sensor technology

disclosed in the '026 patent and '985 patent, that information is not a "contribution to conception" because it is in the prior art. *Id.* at 1445, 1469–70.

Maatuk responds that he presented sufficient evidence to create a genuine issue of material fact that he was a joint inventor of the multi-function sensor in the '105 patent. ECF Doc. 88, Page ID# 1564-69, 1573-80, 1583-86. The gravamen of Maatuk's argument is that he should be considered a joint inventor because he disclosed to TOD, Khadkikar, and Zimmermann certain processes for building a multi-function sensor that: (1) could measure liquid level, temperature, and pressure leakage; and (2) used thermocouples and heaters in a spaced relationship to measure pressure. Id. at 1573–80, 1583–84. He asserts that he also disclosed to TOD the idea of including multiple functions on the same substrate. Id. at 1574, 1584. Although Maatuk acknowledges that his disclosures occurred between 1997 and 1999 and did not relate to all of the '105 patent's claims, he contends that he was nevertheless a joint inventor, because contributions do not need to occur at the same location and time and may be limited only to parts of an invention. Id. at 1583–86. Furthermore, Maatuk argues that the '026 and '985 patents could not have been prior art for the '105 patent, because they did not: (1) describe multi-function sensors; or (2) enable a person skilled in the art to construct the sensors they described. Id. at 1569, 1573, 1586.

TOD replies that Maatuk has not produced evidence showing that his alleged contributions to the '105 patent were "conceived in collaboration" with Khadkikar and Zimmermann or that he contributed to the idea of combining a turbidity sensor with a liquid level sensor or flow sensor. ECF Doc. 89, Page ID# 1667–69. Instead, TOD asserts that Maatuk has only produced evidence showing that he conceived of a multi-function sensor that could measure fluid level, temperature, and pressure leakage well before he worked with Khadkikar and

Zimmermann. *Id.* at 1668. Furthermore, TOD argues that Maatuk has conceded that he did not participate in conceiving the invention combining a turbidity sensor with other sensors, as described in the '105 patent. *Id.* Moreover, TOD contends that the undisputed record evidence shows that the sensor modules in the device described in the '105 patent were disclosed in earlier patents or were already commercially available, as the '105 patent states. *Id.* at 1668–69.

Under 35 U.S.C. § 256, an inventor erroneously omitted from an issued patent may bring an action for correction of named inventor. *Eli Lilly & Co. v. Aradigm Corp*, 376 F.3d1352, 1358 (Fed. Cir. 2004); *but see MCV, Inc. v. King-Seeley Thermos Co.*, 870 F.2d 1568, 1571 (Fed. Cir. 1988) (holding that deceptive intent in failing to join an inventor would not permit correction of inventorship and could invalidate the patent). To establish joint inventorship, the plaintiff must show that he: (1) collaborated with the named inventors; and (2) contributed to the conception of the invention. *Eli Lilly & Co.*, 376 F.3d at 1358–59.

Collaboration requires that the plaintiff's "labors were joined with the efforts of the named inventors," and occurs only "when the inventors ha[d] some open line of communication during or in temporal proximity to their inventive efforts." *Id.* at 1359. Nevertheless, the plaintiff need not have physically worked together with or at the same time as the named inventors, or work with the named inventors on each of the patent's claims. *Vanderbilt Univ. v. ICOS Corp.*, 601 F.3d 1297, 1303 (Fed. Cir. 2010); 35 U.S.C. § 116(a) ("Inventors may apply for a patent jointly even though (1) they did not physically work together or at the same time, (2) each did not make the same type or amount of contribution, or (3) each did not make a contribution to the subject matter of every claim of the patent."). Instead, the key inquiry is whether the plaintiff and the named inventors worked under a common direction to arrive at a definite and permanent idea of the invention as it will be used in practice. *Vanderbilt Univ.*, 601

F.3d at 1302–3 (noting that the joint inventors must have worked "toward the same end"); *Kimberly-Clark Corp. v. Procter & Gamble Distrib. Co.*, 973 F.2d 911, 917 (Fed. Cir. 1992) ("[T]here must be some element of joint behavior, such as collaboration or working under common direction. * * * Individuals cannot be joint inventors if they are completely ignorant of what each other has done until years after their individual independent efforts.").

The plaintiff's contribution to the conception of the invention must be significant when measured against the dimension of the full invention. Eli Lilly & Co., 376 F.3d at 1359 (citing Fina Oil & Chem. Co. v. Ewen, 123 F.3d 1466, 1473 (Fed. Cir. 1997). The key inquiry here is whether the contribution was part of the "inventive thought" in developing the subject matter of the claims in the patent. See Vanderbilt Univ., 601 F.3d at 1302 (noting that each joint inventor must have "ma[de] some contribution to the inventive thought and to the final result"); Ethicon, Inc. v. United States Surgical Corp., 135 F.3d 1456, 1460 (Fed. Cir. 1998) ("[T]he critical question for joint conception is who conceived . . . the subject matter of the claims at issue."); see also Burroughs Wellcome Co. v. Barr Labs., Inc., 40 F.3d 1223, 1228 (Fed. Cir. 1994) ("[T]he test for conception is whether the inventor had an idea that was definite and permanent enough that one skilled in the art could understand the invention."). The plaintiff need not have contributed the same amount to the invention, or even to all of the claims in the patent. 35 U.S.C. § 116(a); Eli Lilly & Co., 376 F.3d at 1358 (noting that there is no explicit lower limit on inventive contribution required); Ethicon, Inc., 135 F.3d at 1460 (Fed. Cir. 1998) ("[E]ach needs to perform only a part of the task which produces the invention."). Nevertheless, a plaintiff does not qualify as a joint inventor when: (1) he merely explained well-known principles or the state of the art at the time of the invention, without having a firm idea of the claimed combination as a whole; (2) his contribution was too far removed from the realization of the invention, such as

merely suggesting an idea instead of the means to accomplish it; or (3) his contribution was merely focused on realizing the invention, after the named inventors conceived of it. *Eli Lilly & Co.*, 376 F.3d at 1359; *Ethicon, Inc.*, 135 F.3d at 1460.

"Because the issuance of a patent creates a presumption that the named inventors are the true and only inventors," a person seeking correction of inventorship must establish that he was an inventor by clear and convincing evidence. *General Electric Co. v. Wilkins*, 750 F.3d 1324, 1329 (Fed. Cir. 2014) (citations omitted). The plaintiff may not rely only upon his own statements and testimony; rather, he must provide other evidence corroborating his allegations. *Eli Lilly & Co.*, 376 F.3d at 1358; *Ethicon, Inc.*, 135 F.3d at 1461; *Symantec Corp. v. Computer Assocs. Int'l, Inc.*, 522 F.3d 1279, 1295 (Fed. Cir. 2008) ("An alleged co-inventor's testimony, standing alone, cannot rise to the level of clear and convincing evidence; he must supply evidence to corroborate his testimony."). "Corroborating evidence may be . . . records made contemporaneously with the inventive process, circumstantial evidence of an independent nature, or oral testimony from someone other than the alleged inventor." *Symantec Corp.*, 522 F.3d at 1295 (quotations omitted).

As a preliminary matter, the undisputed evidence establishes that the invention described in the '105 patent is the *integration* of a turbidity sensor with a fluid level sensor or a fluid flow rate sensor and other sensors into a single multi-function sensor device. ECF Doc. 1, Page ID# 17. The inclusion of the turbidity sensor in the device is integral to the invention, and each claim in the '105 patent recites the inclusion of a turbidity sensor. *Id.* at 17, 33–34. The individual turbidity, fluid level, flow rate, temperature, and pressure sensor modules used in constructing the device are not the inventions described in the '105 patent, as each separate sensor module was commercially available or existed in the prior art. *Id.* at 28–33.

Maatuk has not produced sufficient evidence for a reasonable jury to conclude that he was a joint inventor of the multi-function sensor described in the '105 patent. Anderson, 477 U.S. at 250–52; Akzo Nobel Coatings, Inc., 811 F.3d at 1338–39; Eli Lilly & Co., 376 F.3d at 1358–59; Fed. R. Civ. P. 56(a). Here, the undisputed record evidence shows that Maatuk did not have an open line of communication with Khadkikar and Zimmermann during or in proximity to Khadkikar and Zimmermann's 2003 inventive efforts, as Maatuk had ceased collaborative communication with TOD and its employees in 1999. Eli Lilly & Co., 376 F.3d at 1359; ECF Docs. 87–87-4, 87-12, and 88-3, Page ID# 1479, 1487, 1558–59, 1616–18. Even if this court determined that Maatuk's 1997 through 1999 communications were proximate to Khadkikar and Zimmermann's inventive efforts, however, Maatuk has not produced any evidence that he worked with Khadkikar and Zimmermann to arrive at a definite and permanent idea of a multi-function sensor that integrated a turbidity sensor with other sensor modules. Eli Lilly & Co., 376 F.3d at 1359; Vanderbilt Univ., 601 F.3d at 1302–03. Although Maatuk is correct in noting that the collaboration prong does not require him to have worked on each claim in the invention or at the same time as Khadkikar and Zimmermann, his own testimony – that he never discussed integrating a turbidity sensor and was ignorant of Khadkikar and Zimmermann's inventive efforts until he learned of the '105 patent in October 2014 – disproves any argument that he collaborated with Khadkikar and Zimmermann in developing the invention described in the '105 patent. Vanderbilt Univ., 601 F.3d at 1302-3; Kimberly-Clark Corp., 973 F.2d at 917; ECF Doc. 87-5, Page ID# 1493-98; see also ECF Docs. 87-3-87-4, Page ID# 1481, 1489. Thus, Maatuk has not produced sufficient evidence to create a genuine issue of material fact that he collaborated with Khadkikar and Zimmermann in developing the invention described in the '105 patent.

Maatuk also has not pointed to any evidence sufficient for a reasonable jury to conclude that he contributed to the invention described in the '105 patent. Anderson, 477 U.S. at 250–52; Akzo Nobel Coatings, Inc., 811 F.3d at 1338–39; Eli Lilly & Co., 376 F.3d at 1358–59; Fed. R. Civ. P. 56(a). Any allegation that Maatuk contributed to the conception of a multi-function sensor integrating a turbidity sensor with other sensor modules is disproved by his own testimony that he did not discuss turbidity sensors with Khadkikar and Zimmermann. ECF Doc. 87-5, page ID# 1493–98. Thus, Maatuk cannot show that he contributed to the "inventive thought" in developing a multi-function sensor integrating a turbidity sensor with other sensors. Vanderbilt Univ., 601 F.3d at 1302; Ethicon, 135 F.3d at 1460; Burroughs Wellcome Co., 40 F.3d at 1228. Furthermore, Maatuk's testimony – that he contributed to Khadkikar and Zimmermann's inventive process by disclosing to them (1) the use of thermocouples and heaters in a spaced relationship to measure pressure; (2) a multi-function sensor that combined liquid level, temperature, and pressure sensing modules; and (3) the idea of combining multiple functions on the same substrate – is insufficient to survive summary judgment, because he has not produced any corroborating evidence showing that he disclosed these ideas to TOD as part of the inventive process in developing the device described in the '105 patent. Eli Lilly & Co., 376 F.3d at 1358; Ethicon, Inc., 135 F.3d at 1461; Symantec Corp., 522 F.3d at 1295; ECF Doc. 88-7, Page ID# 1657–61. Here, the letters and other documents Maatuk points to as corroborating evidence establish only that he described details regarding the sensors that he had individually conceived of before contacting TOD and are not related to the conception of a multi-function sensor that integrates a turbidity sensor with other sensor modules. See generally ECF Docs. 88-2 - 88 - 3.

Even if this court were to determine that Maatuk's documents corroborated his testimony that he made a contribution to the '105 patent, he has nonetheless failed to produce evidence showing that his contribution was significant when measured against the dimension of the full invention. Eli Lilly & Co., 376 F.3d at 1359; Fina Oil & Chem Co., 123 F.3d at 1473. First, Maatuk's disclosure of using thermocouples and heaters in a spaced relationship to measure pressure is not a significant contribution, as the '105 patent relies on pressure sensing technology that was already known in the prior art and does not claim the invention of a pressure sensor. Eli Lilly & Co., 376 F.3d at 1359; Ethicon, Inc., 135 F.3d at 1460; ECF Doc. 1, Page ID# 28–33. Second, Maatuk's testimony that he disclosed a multi-function sensor integrating a liquid level, temperature, and pressure sensor modules and the inclusion of multiple functions on the same substrate fail to show a significant contribution because those disclosures merely contributed, if at all, to the means to accomplish the device that Khadkikar and Zimmermann conceived of, and did not contribute to the invention itself, *i.e.* the idea of a multi-function sensor integrating a turbidity sensor with other sensor modules. Eli Lilly & Co., 376 F.3d at 1359; Ethicon, Inc., 135 F.3d at 1460. Thus, Maatuk has not produced evidence sufficient for a reasonable jury to conclude that he made a significant contribution to the invention described in the '105 patent. Anderson, 477 U.S. at 250–52; Akzo Nobel Coatings, Inc., 811 F.3d at 1338–39; Eli Lilly & Co., 376 F.3d at 1358–59; Fed. R. Civ. P. 56(a).

In sum, Maatuk has failed to produce evidence sufficient for a reasonable jury to conclude that he was a joint inventor of the multi-function sensor described in the '105 patent. Accordingly, TOD is entitled to summary judgment as a matter of law on Maatuk's correction of inventorship claim. Fed. R. Civ. P. 56(a); *Anderson*, 477 U.S. at 250–52; *Akzo Nobel Coatings, Inc.*, 811 F.3d at 1338–39; *Eli Lilly & Co.*, 376 F.3d at 1358–59.

E. Damages

TOD argues that, even if Maatuk produced sufficient evidence to show that he was a joint inventor of the '105 patent, he nevertheless is not entitled to money damages. ECF Docs. 87 and 87-1, Page ID# 1443–44, 1465–67. TOD asserts that Maatuk cannot show that TOD unjustly benefitted from its control of the '105 patent, because: (1) joint inventors and owners do not have to account to each other for their use and licensing of a patent; (2) TOD never manufactured, commercialized, or sold a multi-function sensor covered by the '105 patent; and (3) TOD never licensed or enforced the '105 patent. ECF Docs. 87 and 87-1, Page ID# 1443–44, 1465–66. Furthermore, TOD contends that Maatuk cannot show that he suffered any losses due to not being named an inventor, because he: (1) did not allege any financial losses; and (2) testified that his damages theory did not include any losses to him, but his effort to recover for TOD's allegedly improper gains and cost savings. ECF Docs. 87 and 87-1, Page ID# 1443, 1466–67.

Maatuk responds that TOD's motion for summary judgment on the damages issue is premature, because a trier of fact has not yet determined whether he was a joint inventor. ECF Doc. 88, Page ID# 1582. He argues that a reasonable juror could conclude that he is entitled to damages, because his omission as an inventor from the '105 patent deprived him of the right to practice, license, swear back, and claim continuity from the '105 patent. *Id.* at 1566, 1583, 1585–86. Further, Maatuk asserts that "by not being listed on patent #105 as a co-inventor, [he has] legal standing for financial damages due to reputational injuries." *Id.* at 1574; *see also id.* at 1567, 1583, 1585. Moreover, Maatuk contends that TOD's argument – that the '105 patent had no commercial value – is belied by TOD's investments in and attempts to market the multi-function sensor, notwithstanding TOD's failure to complete a sale. *Id.* at 1566–67, 1580–81.

In its reply, TOD reiterates its argument that Maatuk is not entitled to any damages resulting from TOD's, Khadkikar's, or Zimmermann's alleged use of the '105 patent. *Id.* at 1669–70, 1672–74. Further, TOD argues that Maatuk's complaint did not ask for any damages compensating for his own losses as a result of not being named an inventor on the '105 patent. *Id.* at 1670. Moreover, TOD argues that Maatuk has not produced any evidence showing that he suffered any compensable damages to his reputation, lost profits, or lost sales. *Id.* at 1670–72.

"A pleading that states a claim for relief must contain . . . a demand for the relief sought." Fed. R. Civ. P. 8(a)(3). In *Falana v. Kent Displays, Inc.*, this court held that a counseled plaintiff's inclusion of the phrase "such and other further relief as the court may deem appropriate" did not convert his claim seeking correction of inventorship and injunctive relief into a claim for monetary damages. No. 5:08-cv-720, 2009 WL 1362603 *2 (N.D. Ohio 2009). In *Smith v. Hundley*, the Eighth Circuit held that a *pro se* plaintiff's request for "such other and further relief as the Court may deem just and proper," permitted the court to liberally construe the plaintiff's complaint seeking injunctive relief to also seek declaratory relief. 190 F.3d 852, 854 n.7 (8th Cir. 1999).

The statute enabling omitted inventors to sue for correction of inventorship does not provide for monetary damages. *See generally* 35 U.S.C. § 256; *see also* 35 U.S.C. §§ 281–99 (not providing for damages for an omitted inventor in chapter entitled "remedies for infringement of patent and other actions"). Maatuk relies on *Shukh v. Seagate Tech., LLC*, 803 F.3d 659 (Fed. Cir. 2015), to support his proposition that "an omitted co-inventor has a legal standing to ask for monetary damages due to reputation injury." ECF Doc. 88, Page ID# 1583. In *Shukh*, the district court dismissed for lack of Article III standing a plaintiff's correction of inventorship claim because the court concluded that the plaintiff had no ownership or financial interest in the patent when he automatically assigned his invention to his employer. 803 F.3d at 662. The Federal Circuit vacated the district court's decision, holding that "concrete and particularized reputational injury can give rise to Article III standing" to bring a correction of inventorship action. *Id.* at 663–67. In doing so, the Federal Circuit noted that "pecuniary consequences may well flow from being designated as an inventor," but it did not address whether an omitted inventor could recover monetary damages in his correction of inventorship action. *Id.* at 663.

As a preliminary matter, Maatuk's complaint does not demand monetary damages for his correction of inventorship claim. Fed. R. Civ. P. 8(a)(3); *see* ECF Doc. 1, Page ID# 11–12, 14–15. Nonetheless, this Court could construe Maatuk's request for "such other relief . . . as the Court should deem to be fair and equitable" and statement that he suffered reputational harm and lost profits from using and licensing the '105 patent, to state a claim for monetary damages to compensate him for the reputational injury and lost profits that he suffered due to his omission as in inventor. ECF Doc. 1, Page ID# 12, 15.

In any event, Maatuk is not entitled to damages on his correction of inventorship claim. First, Maatuk is not entitled to damages because, as discussed above, he has not produced sufficient evidence for a reasonable juror to find that he was a joint inventor. Second, even if Maatuk could show that he was a joint inventor, he is not entitled to damages in his correction of inventorship claim. Here, the remedy in a correction of inventorship action under 35 U.S.C. § 256 is to have the patent corrected to state the true inventors' names, and Maatuk has not pointed to any authority supporting his claim that his omission as an inventor entitles him to monetary damages. 35 U.S.C. § 256; *Shukh*, 803 F.3d at 663–67; ECF Doc. 88, Page ID# 1583.

Accordingly, Maatuk is not entitled to monetary damages in his correction of inventorship action.

Alternatively, even if this court were to construe the Federal Circuit's statement recognizing the pecuniary interests inherent in being named an inventor to confer a right to recover monetary damages in a correction of inventorship action, Maatuk has not produced sufficient evidence upon which a reasonable juror could rely to find that he is entitled to monetary damages. Here, Maatuk has not produced any evidence, beyond his own conclusory allegations, that he suffered actual damages, such as lost employment or other economic consequences. Cf. Kamdem-Ouaffo v. PepsiCo Inc., 657 F. App'x 954 (Fed. Cir. 2016) ("But reputational injury alone is not sufficient; rather, it must be tied to economic consequences, such as loss of employment prospects."); TechSearch, LLC, 286 F.3d at 1372. Maatuk's evidence showing that TOD had some commercial prospects for the invention in the '105 patent including TOD's bid to sell oil level sensors to Copeland – is inconsequential to show economic harm to Maatuk, as TOD would not have had any duty to account to Maatuk had he been named a joint inventor and such a bid had been accepted. See 35 U.S.C. § 262 ("In the absence of an agreement to the contrary, each of the joint owners of a patent may make, use, offer to sell, or sell the patented invention . . . without the consent of and without accounting to the other owners."). Thus, Maatuk has not produced sufficient evidence to create a genuine issue of material fact that he is entitled to damages, and grant TOD's motion for summary judgment on the damages issue.

IV. Conclusion

Because Maatuk has not produced evidence sufficient for a reasonable jury to conclude that he was a joint inventor of the '105 patent, TOD's motion for summary judgment on

Maatuk's correction of inventorship claim (ECF Doc. 87) is **GRANTED**. Furthermore, TOD's motion for summary judgment is **GRANTED**, as to any claim for damages arising out of Maatuk's correction of inventorship claim that the court could construe from Maatuk's complaint.

IT IS SO ORDERED.

Dated: February 4, 2019

United States Magistrate Judge