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UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

DAVIDSON INSTRUMENTS, INC. Plaintiff, v. PARKER-HANNIFIN CORPORATION, Defendant.	CASE NO. 2:25-cv-00520 **JURY TRIAL DEMANDED**

PLAINTIFF'S ORIGINAL COMPLAINT FOR VIOLATIONS OF THE DEFEND TRADE SECRETS ACT, THE TEXAS UNIFORM TRADE SECRETS ACT, COPYRIGHT INFRINGEMENT, AND VIOLATION OF SECTION 2 OF THE SHERMAN ANTITRUST ACT

1. Davidson Instruments, Inc. ("Davidson"), a Delaware Corporation headquartered in Texas, sues Parker-Hannifin Corporation ("Parker"), an Ohio Corporation headquartered in Ohio, for misappropriation and complete destruction of trade secret assets in violation of the Defend Trade Secrets Act of 2016 (18 U.S. Code § 1836) and the Texas Uniform Trade Secrets Act (Chapter 134A Tex. Bus. & Com. Code). Davidson also sues Parker for infringement of its U.S. Copyright Registration, VAu 1-545-017 (17 U.S. Code § 501). Finally, Davidson sues Parker for attempted monopolization and monopolization of the relevant market in this country for the innovation for fiber-optic pressure sensor measurement systems for combustion in jet engines (15 U.S. Code §§ 2, 15).

INTRODUCTION

2. Davidson, a small Texas company, has specialized in creating fiber-optic technology since 1995. Davidson developed ground-breaking trade secret technology that allows owners of combustion turbine engines to maximize fuel efficiency and eliminate greenhouse gas

emissions. Parker, one of the world's largest corporations, spent almost a decade trying to develop this technology for jet engines, but failed. Parker learned about Davidson's success and stole Davidson's trade secrets. Parker has pursued fraudulent patent applications to destroy and establish control over Davidson's key trade secrets. In doing so, Parker has effectively destroyed Davidson's most valuable trade secret assets and effectively destroyed the enterprise value of Davidson's entire business. Parker has also violated Davidson's copyright. Parker's goal is to monopolize the relevant U.S. market for innovation in this technology as applied to jet engines.

3. Davidson developed a portfolio of trade secret assets made up of revolutionary fiber-optic instrumentation for a very sophisticated fiber-optic pressure measurement system for combustion turbine engines, including jet engines and electrical power generation engines (Davidson's "trade secrets" or "technology"). Davidson's technology provides real data thousands of times per second that can be used with advanced combustion controls to achieve "stoichiometric" combustion (perfect or ideal combustion). Stoichiometric combustion occurs when the precise mixture of fuel and air (oxygen) are present to completely burn the fuel, producing the maximum possible energy (heat) without any excess fuel (greenhouse gas emissions). At the ideal fuel to air mixture, all the fuel is converted to energy and harmful greenhouse gases are eliminated. Davidson's portfolio of trade secrets, in effect, can, when integrated into an advanced combustion control system, turn oil and gas into highly efficient "green energy."

4. Davidson was the first to successfully develop this technology. Davidson was the first to design and extensively test this technology in electrical power plant combustion turbine engines, and later adapt it for use in "Full Authority Digital Engine Controls" (FADEC) required in advanced jet engines. Manufacturers of combustion engines for electrical power plants and jet

engines have asked for products that are based on Davidson's technology to reduce fuel costs and eliminate greenhouse gas emissions.

5. Electrical power plants produce about twenty-five percent of greenhouse gas emissions in the United States. The power generation industry is under pressure to reduce the pollution they release into the environment. Davidson's trade secret technology was tested by five hundred prototypes achieving two million hours of successful operation in power plants in various parts of the country, owned by different operators, in different combustion engines from the world's largest manufacturers. This successful testing produced a demand for Davidson's technology by both engine manufacturers and power plant owners.

6. Airplanes are the number two polluters in the transportation industry after automotive vehicles. Airlines are heavily burdened by fuel costs, and the industry is under pressure to reduce emissions of greenhouse gases. The success of Davidson's testing in the power generation industry also gave rise to demand for Davidson's technology for jet engines.

7. Parker is one of the biggest companies in the world. Parker advertises itself as a leader in industrial instrumentation and controls, as well as a leader in the aviation industry. Parker had tried unsuccessfully to develop similar fiber-optic pressure measurement systems for use in jet engines for nearly ten years with Davidson's only real competitor, Oxsensis Ltd., in Kent, England (n/k/a Wiki Optical Systems Ltd.). Parker, having failed in its own efforts and investments to develop this capability, resorted to misappropriation of Davidson's trade secret portfolio. Worse, Parker has effectively destroyed and fraudulently asserted ownership of Davidson's key trade secret assets.

8. Davidson's key trade secret assets are the combination of the design of its core optical circuit, the use of narrow-band light sources of different peak wavelengths in the optical circuit, and instructions for configuration and operation of the optical circuit. Parker caused public

disclosure and distribution of the combination of these trade secrets in a single integrated document published by the U.S.P.T.O. on June 20, 2024, U.S. Patent Application Publication No. 2024/0201036 A1 ("the '036 publication"), which is U.S. patent application 18/423,261 ("the '261 application"). The key optical circuit is depicted within figure 9 and discussed in paragraphs 0060-0063. The light sources and their relationship with each other are discussed in paragraph 0063. Instructions for the optical circuit's configuration and operation are disclosed as Claims 1 and 9. Davidson's trade secret variations on the configuration, operation and use of the optical circuit are in Claims 2-8 and 10-28. The '036 publication of the '261 application is attached as Exhibit 1.

9. The core optical circuit was copied from a March 20, 2018, presentation by Davidson, made under a non-disclosure agreement to Parker Meggitt SA, formerly known as Meggitt SA, attached as slide fifteen in Exhibit 2. After publication of the combined key trade secrets together in the '036 publication, Davidson registered its copyright in a redacted version of the March 20, 2018, presentation (Exhibit 2), U.S. Copyright Registration, VAu 1-545-017. Exhibit 3.

10. Parker has claimed ownership over these key Davidson intellectual property assets by intentionally making fraudulent filings in the U.S.P.T.O., promoting five employees of its indirect subsidiary Parker Meggitt SA as the sole inventors of the original U.S. patent application 17/107,733 ("the '733 application"), and identifying them as the sole inventors in the later '261 application, knowing they did not invent the claimed inventions. Parker knew from *at least* the fall of 2022 that Davidson's Chief Executive Officer (CEO), [redacted] and its Chief Technical Officer (CTO), [redacted], were the true inventors. Meggitt SA (n/k/a Parker Meggitt SA) is listed as the assignee of the five fraudulent inventors. These fraudulent filings were made to manipulate the misappropriated, stolen and destroyed trade secret

assets in a way that Parker could claim ownership of Davidson's technology and control the market for research and development for this technology in the United States.

11. Davidson sues to recover the entire capital asset value of these key trade secret assets and the other trade secret assets Parker has misappropriated, used, and destroyed, as well as the enterprise value of Davidson's business, which has been effectively destroyed and rendered worthless because of Parker's wrongdoing. Davidson also sues for infringement of its copyright on its March 20, 2018 presentation, slide fifteen, the image of its optical circuit. Davidson sues for the destruction of its business caused by Parker's monopolization of the relevant market for innovation for fiber-optic pressure measurement systems for use in combustion turbine jet engines.

FACTS

12. Davidson's trade secrets are used in its fiber-optic pressure measurement sensors and systems for use in large, powerful combustion turbine engines. These trade secrets are comprised of optics, fiber optics, the selection of light sources, the design of custom thin-film optical coatings, component and material sources, materials science, metallurgy, micromachining, laser welding, analog and digital microelectronics, proprietary system controls, signal processing algorithms, source code, and firmware, as well as business strategies for other potential applications, users, product development, and sales for its fiber-optic pressure measurement sensors and systems. As stated above, among these trade secrets are the key optical circuit, including the selection of light sources and their relationships with the other optical components and to each other, and instructions for configuration and methods for use. Parker published these key trade secrets with instructions for the use of Davidson's core system, in a single document on June 20, 2024, the '036 publication. Exhibit 1.

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13. The trade secrets were created by investment of tens of millions of dollars and nearly three decades of scientific research and development by Davidson's small but resolute team of scientists and engineers led by Davidson's CEO, [redacted] and its CTO, [redacted].

14. Davidson protected its trade secrets by use of non-disclosure agreements with its employees and contractors, and it used military level encryption on its trade secret source code. Davidson used security measures to limit access to its facilities to its employees, contractors, and those who had signed or were otherwise bound by non-disclosure agreements. Further, as a small company of scientists and engineers in the business of creating sophisticated technology, Davidson operated with an ethos of secrecy over its work product. Davidson is not aware of any breaches of its security measures beyond those in this case.

15. Davidson developed and patented landmark fiber-optic sensor inventions in the 1990s and early 2000s. [redacted] were among the inventors of the patented technology. Many of Davidson's inventions developed in this period are also patented in this and other countries.

16. Davidson developed a fiber-optic pressure measurement system that could accurately measure static pressure in downhole oil and gas reservoirs during exploration and production. This legacy system was based on tungsten lamp light sources. Davidson protected significant portions of these early inventions with patents. Davidson licensed this technology to Halliburton in 2008. Halliburton still uses the same manufacturing equipment and sensing system designs it licensed from Davidson in 2008. Davidson refers to this tungsten lamp-based technology for static pressure measurement in downhole applications as its first-generation fiber-optic pressure measurement sensor and system technology.

17. Davidson then developed its second-generation fiber-optic system to monitor pressure pulsations in combustion turbine engines to provide continuous monitoring to aid in the

reduction of greenhouse gas emissions. Sensors and systems deployed for this purpose are subject to extremely harsh conditions because they are embedded next to the engine's combustor – its raging furnace that continuously burns fuel to heat the air for the turbines. Davidson's second-generation fiber-optic technology is based on [redacted] Davidson determined that electrical sensors present challenges and problems for use in the environment around the combustor. As combustion engines become more powerful, and adapted to use alternative fuels like hydrogen, conventional electrical sensors are a liability because they cannot accurately or reliably make the same measurements and deliver the data needed by advanced combustion control systems in these extremely hot, difficult conditions. In this environment, electrical sensors are not capable of accurately measuring [redacted] nor dependable enough to serve this purpose because of degradation from heat, "noise" from shock and vibration, and electromagnetic interference. Furthermore, Davidson determined that electrical sensors are unsuitable for use in combustion turbine engines that burn hydrogen as their fuel because electrical sensing systems can produce sparks, and any risk of sparks is unacceptable because of potential catastrophic effects in a hydrogen fuel environment. By way of contrast, Davidson's fiber-optic sensors are intrinsically safe by U.S. industrial standards.

18. Davidson discovered it could greatly improve the efficiency of combustion turbine engines and reduce greenhouse gas emissions with fiber-optic sensing systems that make [redacted] which can be used in advanced combustion control systems to precisely control the mixture of fuel and air for the ideal combustion reaction. Fiber-optic sensors and systems can function in the tough environment around the combustor because the optics are not subject to degradation by heat, noise, or vibration. Moreover, they do not suffer from electromagnetic interference. Fiber optics do not present a risk of sparks, so they are usable in a hydrogen fuel environment.

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19. Davidson developed an entire portfolio of trade secrets that comprise its second-generation fiber-optic pressure sensing systems. Davidson saw a tremendous opportunity to develop and sell these systems for combustion turbine engines for electrical power plants and jet engines.

20. Davidson built and deployed five hundred prototypes of its second-generation technology in combustion turbine engines from different manufacturers, such as [redacted], in electrical power plants in Texas, California, South Carolina, and other parts of the United States, operated by different owners. These five hundred prototypes were successfully deployed and accumulated over two million hours of time in service in these varied environments, proving the viability of the Davidson fiber-optic sensing system technology. Davidson's second-generation technology was a success.

21. The work was done under confidentiality agreements with the participants that protected Davidson's trade secrets. As a result of these successful tests, Siemens adapted at least three models of its electrical power plant combustion turbine engines to accommodate placement of Davidson's sensors. Siemens and other manufacturers wanted these systems and replacement parts readily available in commercial quantities.

22. Davidson then decided to improve its second-generation sensors and systems by developing a fiber-optic pressure measurement system that could make both static and dynamic pressure measurements simultaneously. The core of this system is the *combination* of the optical circuit in figure 9, with the relationship of the light sources to each other and the other components, as described in paragraphs 0060-0063, and the operational instructions in Claims 1 and 9 on how to make use of the optical circuit and two narrow-band light sources with different peak wavelengths. *See* '036 publication ('261 application), Exhibit 1. Additional variations are

described in Claims 2-8 and 10-28 of the '036 publication ('261 application). Davidson refers to pressure sensors and systems based on this combination as its third-generation technology.

23. In 2012, the European Commission funded a sixteen-member industrial study on sensors for combustion turbine engines that could be used to reduce greenhouse gas emissions. Meggitt SA led this project, known as "STARGATE." Meggitt SA's [redacted] was the project manager. The project group was made up of the large companies that dominated the European Aerospace industry and combustion turbine engine industry in Europe, including Rolls Royce Aerospace, Siemens, and GE. Oxsensis Ltd., Davidson's primary fiber-optic sensing system competitor, was also part of the study group. The results of the study were published in 2016.

24. In 2016, Siemens encouraged Meggitt plc to consider working with Davidson to manufacture Davidson's fiber-optic pressure sensors and systems for combustion turbine engines used for power generation. Meggitt's sensor subsidiary, Meggitt SA, had no fiber-optic sensor technology or products. Nonetheless, by 2016, Meggitt plc and Meggitt SA knew Meggitt SA needed to obtain and develop fiber-optic technology and products as part of the business. Meggitt plc sent representatives from Meggitt SA (Parker Meggitt SA) to Texas to meet with Davidson to evaluate the long-term business opportunity relationship.

25. In 2016, [redacted], former President of Rolls Royce Aerospace and an engineer who knew jet engine combustion technology, became the Chief Operating Officer of Meggitt plc. The STARGATE study pressed home the fact that Meggitt plc was badly behind because it had no sensing technology that could be used to reduce greenhouse gas emissions from combustion turbines engines and jet engines.

26. At this time, [redacted]

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[redacted].

27. In February 2017, [redacted] from Meggitt SA and another representative from Meggitt plc had an introductory meeting with Davidson at its Texas offices, where they learned about the capability of Davidson's fiber-optic sensing technology. [redacted] who lead the STARGATE study declared Davidson's technology as the "Holy Grail" of industrial instrumentation because of its superior capabilities over conventional electronic instrumentation and other sensor technology he saw in the STARGATE study.

28. Meggitt plc authorized discussions of a [redacted] Meggitt SA negotiated the agreement with Davidson. It was made clear to Davidson throughout these negotiations that Meggitt SA was working under the supervision of Meggitt plc's executives, and the deal was subject to their approval at every step of the process.

29. These negotiations and the agreement itself were under non-disclosure obligations. Meggitt plc wanted to project to the world that it had developed this revolutionary technology in-house and had become the world's leading expert in this highly specialized field of extrinsic fiber-optic sensing, so it could dominate the power generation and jet engine advanced combustion control markets with the promise of eliminating greenhouse gas emissions.

30. Meggitt plc and Meggitt SA wanted and demanded secrecy as to Davidson's technology transfer and even insisted that all work be done under the code name "Malbec." Meggitt plc hid the existence of Davidson. Among other things, Meggitt plc created the illusion in its annual reports for Fiscal Year 2020 and Fiscal Year 2021 that it had originated Davidson's second-generation and third generation sensing systems.

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31. This demand for and use of secrecy was a means by which Parker, Meggitt plc and Meggitt SA committed fraud on the U.S.P.T.O., Davidson and the public. It is improper for Parker, or Meggitt SA to attempt to continue to hide any of their actions in perpetuation of their fraud and wrongdoing.

32. The negotiations included technology for power generation and jet engine combustion turbines. The agreement allowed Meggitt SA to manufacture pressure sensors and systems for combustion engines used in power generation. Negotiations for jet engines were limited to [redacted] Further negotiations regarding [redacted] Meggitt SA.

33. The advantages to Davidson were that Meggitt SA was to package the Davidson power generation prototypes for high-volume manufacturing and industrial use while Meggitt SA would be able to work with Davidson to adapt its fiber-optic pressure measurement sensor and system trade secrets technology for installation in jet engines.

34. Davidson delivered its designs, specifications, prototypes, hardware, and software development documentation with firmware and source code, as well as the tremendous amount of information needed to build these products and *trained* Meggitt SA's scientists and engineers on fiber optics principles relevant to its technology and taught them its trade secrets. Davidson retained ownership of its existing technology, and all improvements made to and derivations of and from its fiber-optic technology, including its own first-, second- and third-generation fiber-optic systems and prototypes.

35. When the agreement was finally signed in the first quarter of 2018, Davidson sent trade secret design and other files to Meggitt SA using a secure Meggitt file transfer protocol ("FTP") site. Davidson provided trade secret prototypes and other trade secret information for the second-generation trade secret technology. Davidson sent technical information and source code

for its trade secret third-generation fiber-optic pressure sensor technology. Davidson also provided electronic circuit boards with the hardware, firmware, and software that were operable samples of its third-generation fiber-optic pressure measurement sensor system. The executable code installed on these electronic boards was encrypted to military-grade standards and was considered secure.

36. A partial list of trade secret white paper files transferred to Meggitt SA during the technology transfer is attached as Exhibit 4 (this Exhibit is confidential). These white paper files together, with other information, contain the equivalent of thousands of pages of trade secret technical information. Other files were created and sent as needed after the formal technology transfer program when Davidson designed and manufactured specific prototypes for Meggitt SA's evaluation.

37. On March 20, 2018, one day after signing the licensing agreement with Meggitt SA, Davidson made the first of a series of eight remote presentations from its Texas offices to Meggitt SA's scientists and engineering team in Fribourg, Switzerland. These orientation presentations were made to Meggitt SA's chosen team of scientists and engineers under confidentiality. A copy of the March 18, 2020 presentation (as redacted to preserve trade secrets not otherwise destroyed by Parker, is attached as Exhibit 2). This presentation shows on slide fifteen the key optical circuit for Davidson's third-generation technology, which Meggitt SA and later Parker copied into multiple U.S. and foreign counterpart patent applications. This redacted presentation, including the core optical circuit on slide 15, was copyrighted by Davidson after the '036 publication disclosed Davidson's key trade secrets comprising its core optical system by publishing together the combination of this key fiber-optic circuit, the relationship of the light sources, and the instructions for configuration and operation of the optical circuit. The copyright registration is at Exhibit 3.

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38. Seven other presentations were made by Davidson to Meggitt SA's scientists and engineers over the next two weeks. On information and belief, based on logical inferences from Davidson's knowledge of industry practices for product design, development, certification and sales, the copyrighted materials were also copied by Meggitt SA and Parker into internal design and engineering materials. Further, based on statements made by Parker's Deputy General Counsel, [redacted], to Davidson's CEO, [redacted] the copyrighted material on slide fifteen was copied and sent to [redacted].

39. The formal technology transfer program continued for seventeen more months. During the technology transfer period, Davidson's CEO made two separate week-long trips to meet in person with Meggitt SA's scientists and engineers in its facility in Fribourg, Switzerland. In one meeting of about four hours, [redacted] tutored and collaborated with a member of the Meggitt SA team (one of the supposed inventors, [redacted]), to improve the performance of the system for combustion turbines for electrical power generation. There were multiple emails weekly and phone calls on a regular basis during which Davidson tutored, coached, and worked with the Meggitt SA team. In other meetings [redacted] also taught Meggitt SA employees the trade secret business development strategies Davidson had created on market opportunities and sales to electrical power plant owners and provided trade secret documentation of the business development strategy.

40. During the due diligence and formal technology transfer program, Meggitt SA sent several scientists and engineers to Davidson's rapid prototyping manufacturing facility in Conroe, Texas to work with Davidson engineers, scientists, and technicians. Meggitt also sent other employees to Texas to evaluate progress on Davidson's development of the jet engine sensing systems.

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41. By about the end of the first year of the technology transfer, it was clear to Davidson that Meggitt came to appreciate the tremendous value and promise of the Davidson technology and desperately wanted to own it. In May 2019, Meggitt SA had discussions with Davidson's CEO, [redacted], to ask Davidson to change the ownership provisions in their agreement. Shortly after the initial discussions, Meggitt SA presented Davidson with a memorandum that it contended outlined changes to the agreement. Meggitt's "memorialization" of the supposed agreed changes to the agreement, which would have switched ownership rights in technology and intellectual property from Davidson to Meggitt. Davidson flatly refused to give up its ownership rights.

42. The formal technology transfer program was concluded by Meggitt SA effective as of July 31, 2019.

43. Even though the formal technology transfer program ended in July 2019, Meggitt SA continued to seek engineering and manufacturing support from Davidson. These tasks included the design, manufacture, testing and delivery of three jet engine sensor prototypes based on Davidson's third-generation system at the end of 2019. Afterwards, Davidson continued to provide Meggitt SA with the most critical optical component in the system, Davidson's [redacted] which required Davidson's expertise in the design and manufacture of the component. (Meggitt SA never acted on Davidson's invitation for one of the Meggitt SA team members to come to Texas to work with Davidson and learn how to make the [redacted].)

44. Unknown to Davidson, shortly after Davidson delivered the three jet engine prototype systems to Meggitt at the end of August 2019, Meggitt revealed significant details of Davidson's trade secret prototype information, including *at least* Davidson's key trade secret third-generation core optical circuit and LED components, including the relationship of the LEDs to

each other and the circuit, to [redacted] After the presentation to [redacted], Meggitt SA made a presentation to Meggitt plc executives supervising the project. This presentation was later filed with the U.S.P.T.O. as U.S. provisional patent application No. 62/942,064, which identified Meggitt SA employees as the inventors and Meggitt SA as the owner. A copy of the provisional patent application is attached as Exhibit 5. The disclosures of Davidson's trade secret third-generation optical circuit and LED components and their relationship with each other and the optical circuit are on page 28.

45. The provisional application fraudulently identified five Meggitt SA scientists and engineers as the inventors, even though it was based on Davidson's trade secret optical circuit and other trade secrets. *See* U.S. provisional patent application No. 62/942,064, Exhibit 5. On page 28, Davidson's trade secrets in the key optical circuit and the trade secret relationship between the LED components were disclosed as Meggitt's invention. The optical circuit schematic was the same as Davidson's core optical circuit Davidson disclosed in its March 20, 2018, trade secret presentation, but for replacement of the engineering symbols with English words in boxes. Meggitt disclosed precisely the same LED components in the same relationship Davidson used in the three jet engine prototypes that it delivered to Meggitt at the end of August 2019, and which Davidson had also specified in its August 5, 2019 Optical Interrogator Block Diagram.

46. Meggitt SA's filing of the provisional application was kept secret from Davidson. Instead, Meggitt intentionally violated U.S. patent laws and, rather than identifying the correct inventors, named five of Davidson's students who betrayed their mentor, Davidson's CEO, and claimed credit for Davidson's inventions.

47. Under U.S. law the inventors own the patent rights, so if the Davidson inventors had been named as sole inventors, Davidson would have owned the provisional and any later patents derived from the provisional application.

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48. Davidson continued to discuss modifications to the agreement with Meggitt SA. [redacted], nor did Davidson give Meggitt SA any changes in ownership rights of any intellectual property. Davidson understood that Meggitt plc was in the background of the negotiations and approved the final revisions.

49. Again, unknown to Davidson, and in flagrant violation of U.S. law, on November 30, 2020, Meggitt filed the '733 application naming Davidson's CEO's "students" as the inventors of Davidson's core optical circuit. At the same time, Meggitt also filed counterpart patent applications in China, Canada, Europe, and Japan. Meggitt knew all these applications would be published approximately six months after filing. Meggitt, however, wanted these applications on file to bolster its claim that it developed this highly valuable technology, and to assert *worldwide* exclusive ownership over it.

50. Meggitt SA's filing of the utility patent applications was kept secret from Davidson. Meggitt intentionally violated U.S. patent law, which requires only true inventors to be named as inventors on a utility patent application and that the inventors swear to oaths under penalty of perjury that "I believe that I am the original inventor or an original joint inventor of a claimed invention in the application". 37 C.F.R. § 1.63. Rather than name the true inventors from Davidson, Meggitt instead called on the five employees identified as inventors on the provisional application to file false oaths of inventorship. Filing or swearing to false inventor oaths violates not just patent law but also U.S. criminal law against making false statements under oath. 18 U.S. Code § 1001. Naming any Meggitt employee was a misappropriation of Davidson's trade secrets.

51. If Meggitt SA had named any Davidson employee as an inventor in any patent application in the U.S. or the foreign counterpart patent applications, Meggitt SA would have destroyed Meggitt plc's illusion that the Meggitt organization alone originated, owned, and was the world leading expert in this highly specialized field of fiber-optic sensing.

52. Given that Meggitt SA [redacted] Davidson's technology [redacted] in jet engines and had failed to get Davidson to turn over its intellectual property rights, the logical inference is that Meggitt plc and Meggitt SA concealed their actions from Davidson and named Meggitt SA employees as the sole inventors, not only to perpetuate the illusion of its expertise, but also to deliberately to steal Davidson's intellectual property rights. Upon information and belief, based on Meggitt's failed grab for ownership rights in the 2019 negotiations, its subsequent misrepresentations to the U.S.P.T.O. that its employees were the sole inventors, as well as its failure to disclose to and obtain oaths for the U.S. utility patent applications from the true inventors, Davidson's CEO, [redacted], and its CTO, [redacted], as required by U.S. patent law, Meggitt plc's and Meggitt SA's acts of trade secret misappropriation were willful and malicious and not simply an innocent error.

53. Meggitt's employees, however, did not correctly explain the trade secrets for configuration and operation of Davidson's key optical circuit in the claims of the '733 application as originally filed on November 30, 2020. Much later, when the U.S.P.T.O. examiner was able to substantively review the '733 application, he found the original Meggitt claims only combined prior inventions from two Davidson issued patents, and he rejected all twenty of them in his May 24, 2022, Office Action.

54. Again, without notice to Davidson, the '733 application published on June 3, 2021, as U.S. published application 2020/10164853 ("the '853 published application"). The foreign

counterpart applications published between May 29, 2021 and July 8, 2021.[1] All of these disclosed the same key optical circuit as was in figure 9 of the U.S. application, as well as information about the light sources, but again none of them correctly explained its configuration or operation.

55. These publications misappropriated several of Davidson's key concept trade secret optical circuit and the light sources, but did not destroy the key Davidson trade secrets because Meggitt badly flawed the '733 application's disclosures and claims.

56. The COVID 19 pandemic hit the aviation industry hard in early 2020. According to OAG Aviation, which collects and publishes air travel data: "At the very lowest point in early May 2020, airline capacity fell to less than one third of the level that operated in May 2019." *See* COVID-19 AVIATION INDUSTRY RECOVERY HOW COVID-19 IMPACT THE AVIATION SECTOR?, https://www.oag.com/coronavirus-airline-schedules-data. 2021 saw a slow start to recovery, OAG stated the airline industry continued to suffer into 2022 because of Covid 19 persisting in some regions into that year. Meggitt plc's business suffered enormous setbacks in 2020.

57. In April 2021, Meggitt plc released a 58-slide deck titled, "Introduction to Meggitt PLC." The table of contents of Meggitt plc's slide deck was divided into "overview," "our divisions and products," "our strategy and core principles," "our sustainable future," "latest financials," "well placed for the recovery," and appendices. The appendices included fifteen slides on detailed financial, market, and operations of the company. Based on logical inferences from the facts in this, the prior paragraph, and the following two paragraphs, on information and belief,

[1] CA3101154A1 Pub. May 29, 2021; EP3828506A1, Pub. June 2, 2021; CN112985477A Pub. June 18, 2021; JP2021101183A Pub. July 8, 2021.

Parker and Meggitt plc were in negotiations for Parker's acquisition of one hundred percent of the shares of Meggitt plc.

58. By June 3, 2021, Parker had access to the '853 publication and by mid-July, all the foreign counterpart applications.

59. By July 7, 2021, Meggitt had agreed to a "Clean Team" antitrust provision for the Meggitt acquisition agreement with Parker regarding non-public, confidential information. By August 2, 2021, the Boards of Meggitt plc and Parker had agreed on a definitive acquisition agreement and Parker announced that it had agreed to acquire one hundred percent of Meggitt plc's shares.

60. It is reasonable to infer that Parker would have had access to and reviewed Meggitt plc's 2020 annual report (published in March 2021), which prominently features and implicitly represents that Meggitt had developed and owned Davidson's fiber-optic pressure sensors and systems technology. Since Parker would have had access to the '853 publication (and the '733 application file history) by June 3, 2021, it is a logical inference that Parker would have reviewed the '853 publication, and possibly the '733 application file history, before making its offer.

61. Further, Parker had spent years unsuccessfully trying to develop a pressure sensor system for the same reasons as Meggitt plc and Meggitt SA had done so. As a longtime industry player, a leader in instrumentation and controls, and based on its own failed development efforts, Parker would have been aware of the urgent need for the combustion turbine and jet engine industries to reduce greenhouse gas emissions – and the extraordinary challenges in developing a fiber-optic pressure sensor and system to move toward these goals.

62. On August 2, 2021, Parker issued a press release announcing that it had agreed to acquire one hundred percent of Meggitt plc's shares for eight hundred pence per share, a hefty premium over Meggitt plc's trading price on the prior closing day. At the time, eight hundred

pence per share amounted to a purchase price of about $8.8 billion dollars – by far the largest of Parker's acquisitions in the past few years, if not of all time.

63. If Parker did not perform due diligence on the '733 application and Meggitt SA's agreement with Davidson, and did not discover that it was Davidson's technology in the '733 application and Meggitt's FY2020 annual report, then Parker deliberately avoided this information during the transaction. If so, Parker willfully kept itself blind to Meggitt's fraudulent claims of origination, ownership, and expertise in the technology for over thirteen months until after the closing on September 12, 2022.

64. Upon information and belief, based on industry practices, industry norms and Parker's longstanding and prominent role in this industry, and the confidentiality agreements relevant to the due diligence in its purchase of Meggitt plc, Parker would have known that technology transfers from Davidson to Meggitt would have been under confidentiality restrictions and non-disclosure agreements.

65. A later bidder, TransDigm Group (TransDigm), another U.S. aerospace conglomerate, interjected itself into the purchase of Meggitt after the August 2, 2021, announcement. TransDigm offered a significantly higher price than Parker (900 pence per share, an additional $1.1 billion). However, TransDigm requested additional due diligence materials to proceed with its offer. According to published reports, Meggitt refused to provide any further due diligence despite the significantly higher TransDigm offer. Therefore, only days later, TransDigm withdrew its much higher bid.

66. On September 22, 2021, Meggitt shareholders approved Parker's bid. One year later, on September 12, 2022, Parker closed on the purchase of all the shares of Meggitt plc following further due diligence and regulatory approvals, including a deal with the U.K. government to preserve jobs and investment in the country, in exchange for bypassing full U.K.

antitrust review. Upon closing, Parker immediately dissolved Meggitt plc and replaced it with a private company, Meggitt Ltd.

67. Upon information and belief, based on logical inferences from, among other things: Davidson's post-closing interactions with Parker; Meggitt SA's refusal to deal with Davidson's complaints about misappropriation of its trade secrets; the absence of Meggitt SA from nearly all of the interactions between Parker and Davidson; Parker's own strong interest in the technology and Parker's past failures; Meggitt plc's active supervision and control of the negotiation of Meggitt SA's agreements with Davidson; Meggitt plc's active supervision of developments on the fiber-optic pressure sensor and system (as shown by the November 2019 presentation filed as the provisional patent application); and Meggitt plc's FY2020 and FY2021 annual reports; Parker immediately stepped in and took over control of Davidson's fiber-optic sensing technology.

68. In its U.S. Securities and Exchange 10-Q submitted in September 2022, Parker valued the technology received from Meggitt plc at $1.8 billion dollars. Upon information and belief, based on logical inferences from the foregoing facts (*e.g.,* review of Meggitt's FY2020 and FY 2021 annual reports; as well as Parker's August 2021 slide deck for shareholders), Davidson's trade secrets were the foremost technology in that valuation.

69. On September 30, 2022, Davidson's CTO, [redacted], was preparing for a working meeting with Meggitt SA and saw the meeting materials referring to a gentleman he had not previously met, [redacted]. When [redacted] researched [redacted] technical background, he found the Meggitt SA '853 publication, which revealed that [redacted] and four other Meggitt SA employees were named as inventors of Davidson's trade secret technology. [redacted] immediately called Davidson's CEO, [redacted], who was on vacation in California. [redacted] immediately emailed the President of Meggitt SA in Switzerland,

[redacted], and Meggitt's VP, Strategy, Technology & Engineering, [redacted], but neither responded to his email message asking for an immediate conference call.

70. On November 11, 2022, after having been stonewalled by Meggitt SA for weeks, Davidson had its attorney send a letter to the general counsel of both Parker and Meggitt plc. Parker's Deputy General Counsel responded, but no response to this letter was received from any Meggitt entity. Since then, Parker's Chief Technology Officer and its Deputy General Counsel have dealt with Davidson on this matter, with only two appearances by anyone from Meggitt SA ([redacted] middle managers at Parker Meggitt SA).

71. Parker was not and is not a signatory or otherwise a party to the contract with Meggitt SA, and it has not assumed the contract with Meggitt SA. Parker never had a right to review, possess, or use any of Davidson's trade secrets. Worse, Parker had no right to continue to make or authorize or permit further filings to press forward with the fraudulent '733 patent application. Nonetheless, upon information and belief, based on logical inferences from the foregoing paragraphs, starting with an October 24, 2022 filing in the '733 application file history and the later filing of a new continuation application on January 25, 2024, and as recently as its March 10, 2025, response to an office action from the U.S.P.T.O., Parker has ratified and continued the fraud on the U.S.P.T.O.

72. On September 12, 2023, Davidson's CEO and attorney met with Parker's Chief Technical & Innovation Officer (CT&IO), Deputy General Counsel, [redacted], a Parker Aerospace Vice President, [redacted], and [redacted]. Davidson realized at that meeting its worst fears were true: the '733 patent application and '853 publication were willful and malicious misappropriation of Davidson's trade secret technology. It was clear to Davidson that Parker was so bold as to continue to violate U.S. law by making fraudulent filings in the U.S.P.T.O.

despite its full knowledge of the true facts. It was also clear to Davidson that Parker was using Davidson's trade secrets in product qualification programs with customers.

73. The following day, Davidson sent a thirty-day notice of termination of the agreement, and out of an abundance of caution, invoked the dispute resolution process in [redacted]

74. On October 5, 2023, Parker's Deputy General Counsel, [redacted], asked Davidson to withdraw its notice of termination and its demand for dispute resolution [redacted]. Parker's Deputy General Counsel, [redacted], threatened that if Davidson did not withdraw its notice of termination and the revocation of Meggitt SA's contract, Parker would invoke [redacted] Davidson refused to do so since it was abundantly clear to it that Parker had willfully and maliciously misappropriated Davidson's entire portfolio of trade secrets that would enable the development of advanced combustion control systems for jet engines through Parker's Full Authority Digital Engine Controls (FADEC) program. Further, there could be no doubt or question that neither U.S. trade secret nor patent law nor any agreement allowed for misappropriation by misuse of and applying for fraudulent patents in the U.S. and other industrialized countries nor permit publication of Davidson's trade secrets in the '733 application and counterpart foreign patent application processes.

75. Parker realized there could be no good faith argument that it or Meggitt SA were permitted to make unilateral, unauthorized disclosures and publication of Davidson's trade secrets or to violate U.S. law by wrongfully pursuing fraudulent patent applications. [redacted]

PUBLIC – REDACTED VERSION

[redacted] Having fulfilled all the notifications that anyone might try to argue applied, and [redacted] the agreement was terminated and revoked on November 16, 2023.

76. At no time was there any pretense that Meggitt Ltd. or Meggitt SA had any authority to deal with Davidson's complaints. Parker was firmly in control, and no one from Meggitt Ltd. or Meggitt SA has exercised any authority over the issues. The only involvement at any time was that two middle managers of Meggitt SA ([redacted]) attended in-person meetings as functionaries, deferential to Parker's CT&IO, [redacted], and Parker's Deputy General Counsel[redacted]

77. Nonetheless, even after Davidson terminated the contract, Davidson made it clear it preferred to find a business solution rather than file a lawsuit. Davidson is a small Texas company, and it did not want to have a lawsuit against anyone, especially Parker, one of the largest corporations in the world.

78. Davidson attempted to negotiate a resolution with Parker after termination of the Davidson contract. The parties met in person for the last time on June 6, 2024, and continued to discuss the matter by phone and in correspondence for several more months.

79. Despite being fully aware of, and in fact actively in control of, the fraudulent '733 and later '261 application, Parker nonetheless permitted the U.S.P.T.O. to publish the '261 application two weeks after the June 6, 2024 meeting, on June 20, 2024, as the '036 publication.

80. The '036 publication was a serious new blow to Davidson because for the first time the optical circuit in figure 9, as previously published with information about the LED light

sources, was published with the correct instructions for configuration and operation of them. The errors in the description of the operation of the hardware limited both the efficacy of, and the harm from, the June 3, 2021 '853 publication and foreign counterparts. The new '036 publication, however, including its dissemination, and assertion of ownership of the core trade secret optical circuit design, including information about the LED light sources, *with the correct instructions for operation*, *as well as reliable instructions on other variations*, was a new and devastating development that destroyed the entire capital asset value of Davidson's most valuable assets, thereby causing the complete destruction of the enterprise value of Davidson's business.

81. After the complete destruction of the disclosed trade secret assets, Davidson registered its copyright in the March 20, 2018, presentation (redacted to preserve remaining trade secrets). The schematic of the key optical circuit is on slide fifteen of the presentation, Exhibit 2. The copyright registration is number VAu 1-545-017, Exhibit 3.

82. Parker misappropriated these key trade secrets, destroyed them by publication in June 2024, and has claimed ownership of them in the fraudulent patent office filings since October 24, 2022, asserting control and ownership over these key trade secret assets.

83. As shown by the contract with Meggitt SA, [redacted], as well as Davidson's own sales of second-generation pressure measurement sensors and systems, Davidson's business plans regarding the trade secret portfolio in other industries, and its trade secret business strategies shared with Meggitt SA, the Davidson trade secrets were valuable because they were secret. Further, these same facts, and the other facts herein, show that these trade secrets were used and intended for further use in international and interstate commerce. Now, the value of Davidson's trade secret portfolio has been effectively destroyed, and Davidson's entire enterprise value has been effectively wiped out by Parker.

PUBLIC – REDACTED VERSION

84. Parker has also used Davidson's portfolio of trade secrets to work with customers to develop and test the trade secret concepts and to qualify product designs for use in advanced jet engines, i.e., Full Authority Digital Engine Controls (FADEC) systems, and in combustion monitoring systems used in electrical power generation plants.

85. Parker unjustly enriched itself by wrongfully exploiting Davidson's decades of work and Davidson's millions of dollars of investment into Davidson's trade secrets for Parker's own business purposes and for its sole economic benefit, gaining a tremendous head start in the market. Without Davidson's expertise, it is extremely unlikely that Meggitt SA or Parker would have ever developed what was taken from Davidson. Parker's unauthorized '036 publication destroyed Davidson's assets and gutted Davidson's value as an ongoing enterprise.

86. The terminated Meggitt agreement is one example of the commercial value of the trade secrets in the market, including as used in international and interstate commerce. Davidson's business plans showed it perceived the ability to exploit these assets in multiple industries in the United States, Europe, and Asia (*e.g.,* [redacted]). Further, Davidson's testing of prototypes and commercial sales in interstate commerce of its second-generation technology shows the value of Davidson's trade secrets and their use in interstate and international commerce.

87. Parker's internal copying within its own business, copying for customers and publishing Davidson's copyrighted material, infringes Davidson's copyright registration No. VAu 1-545-017.

88. The claims of the '261 application are not limited to any specific field of use. Parker has also attempted to use and is using its fraudulent patent applications to control key aspects of Davidson's portfolio of trade secrets for use in all harsh industrial applications, not just

those in Meggitt's agreement, including [redacted], all industrial and commercial applications of combustion turbines, [redacted] among many others.

89. Davidson seeks compensation from Parker for the complete destruction of the entire capital asset value of its trade secrets and of its enterprise value, disgorgement of Parker's unjust enrichment by its possession, use, willful and malicious misappropriation, and theft of Davidson's entire portfolio of trade secret assets, together with such other remedies and relief to which Davidson may show itself entitled to in this case.

90. Davidson seeks disgorgement of Parker's unjust enrichment for copyright infringement and the complete loss in value to Davidson's copyright asset, with such other remedies to which Davidson shows itself to be entitled.

91. Davidson asks for compensation for the destruction of its key trade secret assets and business because of the steps Parker took to harm the relevant market and create a worldwide monopoly for the development of fiber-optic pressure measurement sensing systems for combustion turbine engine technology for jet engines.

92. In addition, Davidson asks for attorneys' fees, statutory penalties and enhancements, willful and malicious exemplary damages, treble damages and pre and post judgment interest as provided for under various provisions of the DTSA, TUTSA, Copyright laws, and Antitrust laws.

93. Davidson also asks Parker be required to destroy any of Davidson's trade secret and copyrighted material in its possession and be enjoined from their copying or use.

94. Davidson is also asking for relief to correct the distortion that Parker has created in the relevant market, by among other things, enjoining Parker from using or developing, or

transferring any rights in any technology or products developed in whole or in part from any of Davidson's trade secrets, as well as any of the fraudulent patent applications.

THE PARTIES

95. All the foregoing paragraphs are incorporated by reference in this section.

96. Plaintiff Davidson originated and owned the trade secrets and copyright in suit. Davidson is a Delaware corporation, established in Texas in 1995. It has continually done business in and from Texas, throughout the United States and other countries, in the research, design, development, manufacturing, testing, installation, sales, and service of fiber-optic sensors and monitoring systems.

97. Parker is an Ohio corporation, headquartered in Cleveland, Ohio. Parker is registered to do business as a foreign corporation in Texas, and in fact does business in Texas including in this District. Parker may be served through its registered agent in Texas, CT Corporation System at 1999 Bryan Street, Suite 900, Dallas, Texas 75201.

98. Upon information and belief, based on logical inferences drawn from the facts of this case, Parker's exercise of control over key aspects of worldwide operations and employees through its "win strategy," and its organization of its top executives, among other things, Parker's businesses are an integrated enterprise. Parker has a manufacturing facility and multiple distributors in this District, advertises here, and has over twenty-four facilities in Texas. Key events also occurred in Texas, including but not limited to visits to Texas to initiate the discussion of an agreement, and multiple visits by Meggitt employees to Davidson's facilities in Texas during the technology transfer. Davidson made its March 20, 2018 presentation with its slide on its key optical circuit from its office in Texas. Finally, Davidson suffered its injuries in Texas.

SUBJECT MATTER JURISDICTION

99. All the foregoing paragraphs are incorporated by reference in this section.

100. This Court has federal question subject matter jurisdiction, 28 U.S.C. §§ 1331, 1338, over Davidson's claims for violations of the Defend Trade Secrets Act ("DTSA"); 18 U.S.C. § 1836; the Copyright Act, 17 U.S.C. § 501; and the Sherman and Clayton Antitrust Acts, 15 U.S.C. §§ 2, 15; and the Court has supplemental jurisdiction, 28 U.S.C. § 1367, over Davidson's state law claims under the Texas Uniform Trade Secrets Act, Chapter 134A of the Texas Business and Commerce Code. This Court also has diversity of citizenship jurisdiction, 28 U.S.C. § 1332, over Davidson's state law claims, because the amount in controversy exceeds $75,000 exclusive of interest, costs and attorneys' fees, Parker is a citizen of Ohio, and Davidson is a citizen of Delaware and Texas.

PERSONAL JURISDICTION

101. All the foregoing paragraphs are incorporated by reference in this section.

102. Exercise of personal jurisdiction in Texas over Parker comports with due process and likewise satisfies the Texas long-arm statute, TEX. CIV. PRAC. & REM. CODE § 17.042(2), because Parker has committed torts intended to harm Davidson, a Texas resident. Parker has also carried out its plan to steal Davidson's technology by causing the '261 application to publish on June 20, 2024, in Texas among other places. Parker is also registered to do business in Texas and does business in Texas, by among other things, operating twenty-four locations in Texas that include management, sales, distribution and manufacturing facilities for both of its segments, and has contracts with distributors, including products for jets and other aircraft. Further, Parker has leveraged the prior wrongful acts of Meggitt SA, now Parker Meggitt SA, in Texas.

103. Parker also advertises and promotes the stolen technology as its own through its website, which is accessible from Texas, among other places. Further, Davidson's claims arise in part from sharing Davidson's technology under duties of non-disclosure at and from its facilities in Texas during a technology transfer with what is now Parker Meggitt SA, and from Parker

knowingly destroying Davidson's Texas-based trade secret assets by causing the U.S.P.T.O. to publish throughout the United States and other places, the key components of its trade secret technology together for the first time on June 20, 2024, causing harm and injuries to Davidson in Texas. Further, Parker has committed fraud by omission on Davidson by failing to disclose the patent applications discussed herein as required by U.S. patent law.

VENUE

104. All the foregoing paragraphs are incorporated by reference in this section.

105. Venue is proper in this district for Davidson's DTSA claims under 28 U.S.C. § 1391(b)(1) because Parker resides in this District since it is subject to personal jurisdiction here. Moreover, Parker has a manufacturing facility in Nacogdoches, Texas, and distributors in Texarkana, Longview, Tyler, and Beaumont, Texas as well as other locations within this district.

106. Venue is also proper over the TUTSA claim under supplemental jurisdiction to Davidson's federal question claims based on the venue statute applicable to each of them. 28 U.S.C. §§ 1391(b)(1), 1400(a), and 15 U.S.C. § 22. Venue is proper over the state law claims because Parker resides in this judicial district as shown in the preceding paragraphs. 28 U.S.C. §1391(b)(1).

107. Venue is proper in this district for the Copyright claims under 28 U.S.C. § 1400(a) because, as explained above in personal jurisdiction and for the DTSA venue above, Parker and its agents reside or may be found in this district: Parker has a manufacturing facility in Nacogdoches, Texas, and distributors in Texarkana, Longview, Tyler, and Beaumont, Texas as well as other locations within this district.

108. Venue is proper for Davidson's Antitrust claims under 15 U.S.C. § 22 because, as explained above, Parker may be found or transacts business in this district. Further, Parker also

has a manufacturing facility in Nacogdoches, Texas, and distributors in Texarkana, Longview, Tyler, and Beaumont, Texas as well as other locations within this district.

FIRST CAUSE OF ACTION
VIOLATION OF THE DEFEND TRADE SECRETS ACT OF 2016

AND

SECOND CAUSE OF ACTION
VIOLATION OF THE TEXAS UNIFORM TRADE SECRETS ACT

109. Davidson incorporates by reference all preceding paragraphs in this complaint.

110. Davidson brings its first cause of action pursuant to 18 U.S.C. § 1836 and its second cause of Action pursuant to the Texas Uniform Trade Secrets Act, Chapter 134A of the Texas Civil Practice and Remedies Code. The Defend Trade Secrets Act of 2016 ("DTSA") and the Texas Uniform Trade Secrets Act ("TUTSA") are both based on the Uniform Trade Secrets Act adopted by The National Conference of Commissioners on Uniform State Laws. For this complaint, the minor differences between the DTSA and TUTSA are not relevant, and they have the same elements for their causes of action.

111. Davidson is the owner of the trade secrets as defined and described in the preceding paragraphs of the complaint and as shown in the exhibits referred to in the complaint.

112. Davidson's misappropriated trade secrets include all of those previously shared with Meggitt through Davidson's presentations, prototypes, the broad range of information uploaded to Meggitt SA's secure FTP site and otherwise provided by Davidson in person or in media, prototypes, boards, as well as from Davidson's personnel working with and teaching Meggitt's employees the full range of its portfolio of trade secrets. A partial list of trade secrets by topic uploaded to the FTP site is attached as Exhibit 4 (under seal). As alleged above, key trade secrets were disclosed in figure 9 and paragraphs 0060-0063 in the '733 and '261 applications and the published versions of those applications. The operating instructions for the key optical circuit

in figure 9 in independent claims 1 and 9 in 18/423,261, with variations in claims 2-8 and 10-28 of the '261 application and its published counterpart, include the optical circuit on slide 15 of Exhibit 2, and the amendment language in the '733 application file history filed on October 24, 2022. Trade secrets were also disclosed on page 28 of the November 29, 2019, provisional application, Exhibit 5. The same trade secrets disclosed in the '733 application were also disclosed in its counterpart Chinese, Canadian, European, and Japanese patent applications. The trade secrets are part of a portfolio of trade secrets that constitute Davidson's second- and third-generation fiber-optic sensing systems for use in fiber-optic pressure measurement sensors and systems for combustion turbine engines and a variety of other harsh industrial applications.

a. As explained above, Davidson took reasonable measures to protect its trade secrets from disclosure and to preserve their confidentiality. These measures included the use of non-disclosure agreements, encryption of files, and security measures at its facilities, as well as non-disclosure agreements with its employees, contractors, customers, and potential business prospects.

b. As explained above, Davidson's trade secrets are forms and types of information, including business, scientific, technical, economic, or engineering information, that includes formula, design, prototype, pattern, plan, compilation, program, device, code, method, technique, process, procedure, in intangible form, tangible media and in physical prototypes. These trade secrets are described in detail in the foregoing paragraphs, with further information in the attached Exhibits.

c. As explained above, Davidson's trade secret information derives independent economic value, actual or potential, from not being generally

known to, and not being readily ascertainable through proper means by, another person who can obtain economic value from the disclosure or use of the information.

d. As explained above, Parker took and misappropriated all of Davidson's portfolio of trade secrets for its second- and third-generation fiber-optic pressure measurement sensors and systems for combustion turbine engines and destroyed key trade secret core concepts that are the core of Davidson's portfolio of trade secrets, resulting in a complete destruction of Davidson's business. Parker took possession of the trade secrets, knowing or with reason to know it was taking them by improper means, or otherwise had knowledge, reason to know, and/or was willfully blind to this problem. As alleged above, Parker knew before it closed on the purchase of Meggitt plc that it was taking the trade secrets from a party under an obligation to keep them confidential (as is customary in this industry). By November 11, 2022, just two months after the closing of the stock purchase transaction, Davidson laid the facts out for Parker in a detailed letter such that Parker cannot deny knowledge after receiving that letter.

e. Parker used improper means to acquire knowledge of the Davidson trade secrets knowing it was not authorized by Davidson to receive them, possess them, or use them.

f. Parker knew at the time of its disclosure and use, or had reason to know, that the knowledge of the trade secrets was acquired under circumstances giving rise to a duty to maintain their secrecy and not publish them, including but not limited to its knowledge that the practice in the industry

is that research and development and design technology are maintained under confidentiality agreements.

g. Parker knew the trade secrets were transmitted from or through people at Meggitt plc and/or Meggitt SA (a/k/a Parker Meggitt SA) who owed a duty to Davidson to maintain the secrecy of and limit the use of the trade secrets, including from, but not limited to, its knowledge that the practice in the industry is that research and development and design technology are maintained under confidentiality agreements.

h. Parker made worldwide public disclosures and use of Davidson's trade secrets without express or implied consent by Davidson, including but not limited to in the filings in the U.S.P.T.O. after September 12, 2022, such as the October 24, 2022 amended claims in the U.S. original utility application 17/107,733; the January 25, 2024 continuation U.S. utility patent application 18/423,261; and U.S. published patent application 2024/0201036 A1, June 20, 2024. These facts are set forth in the preceding paragraphs in detail.

i. Parker has also misappropriated Davidson's trade secrets by accessing and possessing them without permission from Davidson.

j. Parker misappropriated Davidson's trade secrets by using them to develop fiber-optic pressure measurement sensors and systems for combustion turbine engines for the power generation and aerospace industries, including jet engines with, among others [redacted], without Davidson's permission.

k. Parker has used the trade secrets to get a "head start" on development of these products over its competitors by misappropriating the trade secrets and destroying trade secrets in its June 20, 2024 published patent application claiming ownership of and imputing to itself the full and exclusive rights over, the technology.

l. Davidson effectively lost the entire value of the trade secrets assets misappropriated and destroyed by Parker's publication of them as stated above in the 18/423,2610 application, and by other unlawful acts as described above. Davidson was injured by Parker's violations of the DTSA and TUTSA. Parker has also been unjustly enriched by its patent assets based on Davidson's trade secrets, its internal design and development assets using, exploiting or derived from Davidson's trade secrets as well as avoided cost of development, and a significant increase in its capital asset value and other value.

m. As described above, the trade secrets that have been misappropriated are related to a product or service used in Texas, including prototype jet engine pressure sensors and system boards, as well as pressure sensors and systems for use in power plants in Texas, and/or intended for use in Texas, interstate and foreign commerce, as in jet engines, and the trade secrets were used in commerce in Texas, and also interstate and foreign commerce with Meggitt and Siemens, among others.

n. Davidson first discovered and got notice of misappropriation and destruction of trade secrets on September 30, 2022.

113. **Fraudulent Concealment of Facts Relevant to Statute of Limitations**: Separate and apart from the DTSA and TUTSA statutory limitations periods based on discovery of the trade secrets and the limitations on copyright infringement claims and damages, Parker, and prior to the closing of the Meggitt plc purchase, Parker Meggitt SA (formerly Meggitt SA), fraudulently concealed the causes of action alleged by Davidson by filing the provisional application and prosecuting the June 3, 2021 published application without complying with legal requirements regarding filing in the names of all inventors on non-provisional patent applications. Both Parker and Parker Meggitt SA had a duty to contact all the inventors of the matters claimed in the non-provisional patent applications prior to filing and obtain their consent and oaths. Parker in 2024 and Parker Meggitt SA in 2020 violated these laws and committed fraud by omission against Davidson in filing the original U.S. '733 utility application and the U.S. '261 continuation application without notice to Davidson or the Davidson inventors, despite their legal obligations to do so. The fraud by Parker was further based on naming as inventors Davidson's CEO's former students who were then Meggitt or Parker employees, instead of Davidson's CEO and CTO, [redacted]. This fraud continued through publication of the '261 application on June 20, 2024, and persists as to the U.S.P.T.O.

114. Davidson is entitled to the following relief:

a. Compensation for the loss of its entire enterprise value, and the entire capital asset value and complete destruction of its trade secret assets.

b. Parker's unjust enrichment.

c. Enhanced (exemplary) damages based on Parker's willful and egregious (malicious) conduct of up to two times the damages in the preceding subparagraph and attorney's fees and interest.

115. Davidson is also entitled to an injunction against Parker, its parent, subsidiaries, affiliates, successors, owners, and their agents, attorneys, and employees from working in the field of [redacted], fiber-optic pressure measurement technology for combustion turbine engines to design, develop, manufacture, test, or sell any prototypes or products containing any of Davidson's trade secrets and from enforcing or transferring any interest in any patent in any country claiming priority in whole or in part to U.S. provisional application No. 62/942,064 (filed on Nov. 29, 2019), U.S. Patent Application 17/107,733 (filed on November 30, 2020). These include the foreign counterpart patents to the '733 application, including Chinese, European (French, British, German, Italian and other EPO countries), Japanese, and Canadian patents (see footnote 2), U.S. Patent Application 18/423,261 (filed on January 25, 2024), and any other U.S. continuation or divisional applications, and any counter-parts in any other jurisdiction, or any patent, patent application, utility model or other intellectual property claiming priority in whole or in part to any of them.

THIRD CAUSE OF ACTION
COPYRIGHT INFRINGEMENT

116. Davidson incorporates by reference all preceding paragraphs in this complaint.

117. Parker had notice that the June 3, 2021 published application (17/107,733) wrongfully copied and printed the optical circuit (as, for example, shown on slide fifteen of Davidson's March 20, 2018, PowerPoint presentation), on which Davidson has registered its copyright Exhibit 2 (redated presentation); Exhibit 3 (copyright registration). The optical circuit concept sketch in slide fifteen of Exhibit 2 is copied into and published within figure 9 of the June 3, 2021 published application. Parker employees knew by at least November 11, 2022, and most likely before, that the optical circuit schematic described in figure 9 was identical to the core concept of the optical circuit sketch on slide 15 and that this optical circuit concept sketch was not

Meggitt's original work but rather was copied from or was a derivative of Davidson drawings. The published '261 application uses boxes with words instead of the symbols used in the drawing of the optical circuit concept sketch on slide fifteen of Exhibit 2. Parker published or caused to be published or otherwise permitted publication of the same figure 9 in the June 20, 2024 U.S. published patent application 2024/0201036 A1, either infringing Davidson's registered copyright on the optical circuit by literal copying or by publishing a derivative of Davidson's registered copyrighted material. This copyright claim is based on the '261 application, and figures submitted to the USPTO after September 12, 2022, in the '733 application file history.

118. Davidson's copyright registration on its unpublished slide presentation is presumed to be valid.

119. Parker had access to the copyrighted material prior to when it resubmitted figure 9 with its January 25, 2024, '261 continuation application and before causing the '036 publication to publish on June 20, 2024. The published figure 9 in the '261 patent application includes the copyrighted material on slide fifteen of Exhibit 2. Parker's publication is a copy, or alternatively is a derivative, of the copyrighted material on slide fifteen of Exhibit 2 and is so similar to Davidson's copyrighted materials that it is *prima facie* evidence of copying. Moreover, based on logical inferences based on the foregoing paragraphs, ordinary business practices in product development, and upon information and belief, Parker has made copies of the material in digital files in DRAM and FLASH semiconductors, magnetic hard drives, DVDs and other digital storage, on paper, and in other media. Alternatively, any such copied or similar circuits are derivatives of Davidson's copyrighted work.

120. Davidson is entitled to the remedies permitted by law.

121. This infringement was a willful, planned, intentional violation of Davidson's rights.

122. Davidson is entitled to an injunction against further infringement of its copyrighted material, including by causing publication in any digital media, issued patents, projects, presentations, bids, work papers, or proposals or in any other fixed media.

FOURTH CAUSE OF ACTION

ATTEMPT TO MONOPOLIZE AND MONOPOLIZATION OF FIBER-OPTIC PRESSURE MEASUREMENT SENSOR AND SYSTEMS INNOVATION MARKET FOR COMBUSTION TURBINE ENGINES

123. Davidson incorporates by reference all preceding paragraphs in this complaint.

124. Jet engines emit greenhouse gas from fuel that has not been consumed in the combustion process. Failure to burn all fuel in the combustion reaction wastes fuel and is inefficient.

125. Air travel creates enormous amounts of greenhouse gas emissions. Air travel is the second largest producer of greenhouse gases in the transportation industry behind automotive vehicles.

126. Achieving the most efficient combustion possible, stoichiometric combustion (a/k/a ideal or perfect combustion), is very important. The EU reports that absent dramatic changes, air travel emissions will triple by 2050.[2] The EPA estimates that nearly one-third of greenhouse gas emissions are from transportation. The EPA is currently working on a new framework for the reduction of greenhouse gas emissions by jet engines.[3]

127. Separately, the cost of jet fuel can be as much as twenty-five to forty percent of an airline's operating costs and has a direct impact on airline tickets and freight costs to consumers. The demand for air travel and air cargo directly impacts other segments of the aerospace industry,

[2] https://climate.ec.europa.eu/eu-action/transport/reducing-emissions-aviation_en (last visited May 12, 2025).
[3] https://www.epa.gov/transportation-air-pollution-and-climate-change/carbon-pollution-transportation (last visited May 12, 2025).

including manufacturers and service providers. Likewise, higher costs of air travel impact adjacent industries such as tourism and hospitality, which harms consumers.

128. The jet engine industry has been working on fiber-optic sensors for specific jet engine applications because piezoelectric and other electrical sensors are not capable of making reliable [redacted] pressure measurements near the combustion zone.

RELEVANT MARKETS

129. There is a relevant market in the U.S. for technological innovation and development of fiber-optic pressure measurement sensors and systems for combustion turbine jet engines. The relevant market is for research and development of fiber-optic pressure sensing systems for monitoring and controlling combustion for jet engines (also referred to as "the innovation market"). No other technology can perform this function effectively to reduce or eliminate greenhouse gas emissions and maximize fuel efficiency. *See e.g.,* Meggitt SA's technical paper titled "Lean Blowout Sensing and Processing via Optical Interferometry and Wavelet Analysis of Dynamic Pressure Data."[4]

130. Demand is shown by Meggitt plc's and its subsidiary Meggitt SA's agreement related to Davidson's trade secret innovations and technology and by subsequent events. Demand is also shown by Parker's licenses for Oxsensis' fiber-optic sensing innovations and technology beginning in 2013. Demand is also shown by Parker's decision continuing to misappropriate and destroy Davidson's trade secrets in Parker's press to control this market. Demand is also shown by [redacted] work with Parker and Parker Meggitt SA to develop this technology. Demand is also

[4] Nicchiotti, G., Soliński, K., & Giuliani, F. (2021). Lean Blowout Sensing and Processing via Optical Interferometry and Wavelet Analysis of Dynamic Pressure Data. In *6th European Conference of the Prognostics and Health Management Society 2021*, *available at* https://papers.phmsociety.org/index.php/phme/article/download/2805/1785 (last visited May 12, 2025).

shown by Davidson's sales of its second-generation technology to independent power producers, owners of electrical power generation plants, as well as Siemens' and [redacted] actions to pursue Davidson's second- and third-generation prototype fiber-optic sensing systems.

131. Demand in this market is shown by, among other things, [redacted] Parker has admitted to Davidson that it is working [redacted] to develop Davidson's innovations and technology for [redacted] and with Siemens to qualify the same technology for use in electrical power generation plants that use combustion turbine engines.

BARRIERS TO ENTRY

132. There are enormous barriers to entry into the relevant market. The time and cost to develop fiber-optic sensors for combustion for jet engines has been high for Davidson and Oxsensis Ltd. (now, Wika Optical Sensing Ltd.). Oxsensis Ltd. entered an exclusive agreement with Parker to develop its technology in 2013, renewed in 2017, and Parker has not yet announced a commercial fiber-optic-based jet engine pressure measurement sensor using the Oxensis Ltd. Technology. The cost of development by Davidson has been in the eight figures and was the result of decades of work by a resolute team. Likewise, Oxsensis had costs to develop, and Parker incurred license fees and development costs working with Oxsensis technology. Finally, the time and expense invested in development of the technology by Parker, Meggitt plc, and Meggitt SA illustrates the high barriers to entry into this market.

133. Today, the most significant barrier to entry is that Parker has fraudulently claimed complete ownership of Davidson's technology in its '036 publication, its '261 application, and to some extent its Chinese, Canadian, European, and Japanese patent applications and any patents that have or may issue from them. Combined with Parker's exclusive license with Wika Optical

Sensing Ltd. (f/k/a Oxsensis Ltd.) for jet engines, Parker has taken control of the relevant markets for innovation and development for fiber-optic pressure sensors for jet engines that are capable or potentially capable of performing essential functions for such pressure sensors and systems,

134. Parker's fraudulent patent application is not limited by industry or application. Parker has fraudulently pursued the claims, for among other reasons, to sweep in broad coverage to preempt other competitors in jet engines and to also eliminate development that might apply in the jet engine market developed in other applications. The claims in the original '261 application were allowed four times during prosecution, and it would appear to a reasonable patent agent or attorney they are likely to be allowed again in the continuation patent application. The deterrent effect of a Fortune 250 company's claim to complete and exclusive ownership of this technology has a powerful, chilling effect on others – especially considering other economic barriers to entry.

ATTEMPT TO MONOPOLIZE AND/OR MONOPOLIZATION

135. There are only two established sources of innovation and technology for fiber-optic pressure measurement sensors for monitoring combustion: The first is Davidson, which has had its technology proven in combustion turbine engines, and the second is Wika Optical Sensing Ltd. (f/k/a Oxsensis Ltd.)[5], a company that has similar fiber-optic technology.

136. In 2013, Parker entered an exclusive license with Oxsensis to develop a fiber-optic pressure sensing system that could monitor conditions near the combustors of jet engines. In 2017, Parker and Oxsensis announced a renewal of their earlier exclusive agreement. Oxsensis had published that it had tested its fiber-optic pressure sensing technology on power generation combustion engines.

[5] https://www.wika.com/en-gb/lp_oxsensis.WIKA (last visited May 12, 2025).

137. As explained above, Davidson had tested and verified its fiber-optic pressure sensor technology and systems, which led to Siemens recommending that Meggitt obtain an agreement to use or acquire Davidson's technology. Siemens was so impressed with Davidson's fiber-optic sensing systems that it modified its 501-Series combustion turbine engines to improve the interface of Davidson's fiber-optic sensing system with the Siemens' combustors.

138. Parker has persisted in pursuing the '261 continuation application even though it knows the duties under applicable regulations, such as 37 C.F.R. §§ 1.63, 1.56, to be complete and truthful in every application have been violated, and that the inventors' oaths are false in violation of 18 U.S.C. § 1001.

139. As shown above, the market for this fiber-optic pressure sensor innovation was divided between two large competitors, Parker and Meggitt plc, prior to Parker closing on the purchase of Meggitt plc's stock on September 12, 2022. Parker took over the Davidson relationship and technology immediately after the closing.

140. By acquiring Meggitt SA, an affiliate of Meggitt plc, Parker effectively combined all available innovation and technology for fiber-optic pressure measurement sensors for use in monitoring combustion in jet engines and knew that no other competitors had agreements for either Oxsensis' or Davidson's technology for this purpose. Moreover, Parker's published fraudulent patent application asserts complete and exclusive ownership over Davidson's technology for all purposes, effectively deterring anyone else from working with Davidson and resulting in the destruction of Davidson's business enterprise.

141. Parker has no right, title, or license to the Davidson technology, yet it has taken possession, controlled and manipulated the technology at least since it closed on the purchase of Meggitt plc stock on September 12, 2022.

142. Parker has engaged in fraudulent patenting measures as explained above.

143. As explained above, by misappropriating and effectively destroying the entire enterprise value and capital asset value of Davidson's trade secret assets and claiming exclusive ownership rights of Davidson's fiber-optic sensor technology through its fraudulent patent applications, Parker has destroyed Davidson.

144. By declaring complete and exclusive ownership of key Davidson trade secrets, Parker is attempting to get the exclusive control it needs over Davidson's innovation and technology so it can consolidate the only two sources and monopolize the innovation and technology markets in the U.S. Moreover, Parker's fraudulent '261 application makes it possible for it to control the market. Moreover, disclosure of this technology to the public in its published patent applications in the U.S. and other countries will bar anyone else from patenting the same technology due to Parker's and Meggitt's disclosures. With control of the only two sources of the technology today, the lack of acceptable substitutes, the barriers to entry inherent in the relevant markets, and the barriers to entry from its fraudulent patent applications, Parker is now close to monopolizing the relevant innovation and technology markets or alternatively has monopolized them.

ANTITRUST INJURY AND STANDING

145. Parker's attempt to monopolize depends on its fraudulent patent application 18/423,261 misappropriating Davidson's technology to control Davidson's technology for fiber-optic jet engine sensing systems for use in Full Authority Digital Engine Controls (FADEC) systems specifically, and advanced combustion controls of combustion turbine engines more generally.

146. Parker has injured Davidson by destroying its core concept trade secret assets in its misappropriation and any derivatives of the Davidson optical circuit and Davidson's proprietary system controls and signal processing algorithm and by causing key Davidson trade secret assets

to be effectively destroyed by publication in the '036 publication, as well as claiming complete and exclusive ownership of the technology in this fraudulent patent application, thereby destroying Davidson. Because of the complete destruction of Davidson's core capital assets and entire business, Davidson was unable to sell or joint venture or otherwise monetize its innovation and technology in any application. Davidson has suffered a fatal injury to its business and property from the harm to competition deliberately pursued by Parker's wrongful conduct at Davidson's expense.

147. Davidson has been injured by Parker's anti-competitive conduct in its scheme to attempt to monopolize or alternatively monopolize the relevant innovation and technology markets in violation of Section 2 of the Sherman Antitrust Act and Section 4 of the Clayton Antitrust Act. 15 U.S.C. §§ 2, 15(a). Accordingly, Davidson has suffered antitrust injury.

148. Davidson is in the best position to bring and pursue these antitrust claims against Parker since it has knowledge and documentation of the facts, has experienced counsel in antitrust matters (especially involving intellectual property and technology) and has the wherewithal to see this matter to final resolution. Moreover, Davidson has the technical expertise to understand the science and engineering needed to pursue these claims. Davidson is qualified and in a strong position to enforce the antitrust laws in this case, and, moreover, no one else has the unique combination of knowledge, technical background, scientific understanding, resources, incentives, and determination to pursue these claims. Accordingly, Davidson has antitrust standing.

149. Parker has violated Section 2 of the Sherman Antitrust Act, 15 U.S.C. § 2, because it has willfully harmed competition in a relevant market in trade or commerce within this country and with foreign nations.

150. Davidson has been injured in its business or property because of Parker's violation of the antitrust laws and has both standing and antitrust injury to sue. Section 2 of the Sherman Act, Section 4 of the Clayton Antitrust Act (15 U.S.C §§ 2, 15(a)).

151. Davidson is entitled to recover threefold the damages it has sustained as antitrust injuries, the cost of suit, including reasonable attorneys' fees, and pre- and post-judgment interest as provided in 15 U.S.C. § 15(a). Davidson is entitled to an injunction against Parker, its parent, subsidiaries, affiliates, successors, owners, and their agents, attorneys, and employees from working in the field of [redacted], fiber-optic pressure measurement technology to design, develop, manufacture, test, or sell any prototypes or products containing any of Davidson's trade secrets.

DEMAND FOR JURY TRIAL

152. Davidson hereby demands a jury for all issues so triable.

CONCLUSION AND PRAYER

WHEREFORE, Davidson respectfully requests that this Court GRANT the following relief:

153. Entry of judgment holding Parker liable for misappropriating and effectively destroying Davidson's enterprise value and the entire capital asset value of its trade secret assets under DTSA and/or the TUTSA, awarding it compensation for misappropriation and the complete destruction of those assets, disgorgement by Parker of assets wrongly taken or developed; and enhanced (exemplary) damages and attorneys' fees.

154. Entry of judgment holding Parker liable for infringing Davidson's copyrights at issue in this litigation, along with an injunction against further infringement.

155. Entry of judgment holding Parker liable for violating the Sherman Act, compensation for injury to Davidson's business or property with treble damages and attorneys' fees.

156. An order that all copies of documentation of Davidson trade secrets in Parker's possession or under its control or made or used in violation of Davidson's trade secrets or copyrights, and all means by which such copies have been reproduced, be impounded and destroyed.

157. An injunction against Parker, its parent, subsidiaries, affiliates, and their agents, attorneys, and employees from working in the field of [redacted], fiber-optic pressure measurement technology to design, develop, manufacture, test, or sell any prototypes or products containing any of Davidson's trade secrets ; and

158. an order awarding pre- and post-judgment interest.

159. Davidson asks for such other and further relief as to which it may show itself entitled.

Date:

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