

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MISSOURI

Engineered Corrosion Solutions, LLC,)	
)	Civil Action No. _____
Plaintiff,)	
)	
v.)	
)	
South-Tek Systems, LLC,)	
)	JURY TRIAL DEMANDED
Defendant.)	

COMPLAINT FOR PATENT INFRINGEMENT

1. Plaintiff Engineered Corrosion Solutions, LLC (“ECS”), by and through its attorneys, Harness, Dickey & Pierce, PLC, brings this action seeking monetary damages and injunctive relief against Defendant South-Tek Systems, LLC (“South-Tek”), to remedy South-Tek’s infringement of United States Patent No. 9,186,533 (“the ‘533 Patent”), in violation of the Patent Act of the United States, 35 U.S.C. §§1 *et seq.*, and the harm caused thereby. (A true and correct copy of the ‘533 Patent is attached hereto as Ex. 1).

THE PARTIES

2. Plaintiff Engineered Corrosion Solutions, LLC, is a Delaware limited liability company having its principal place of business at 2043 Woodland Pkwy., St. Louis, MO 63146. ECS is a leading corrosion engineering firm that traces its roots to 2003 and specializes in providing risk reduction solutions for fire sprinkler systems. ECS designs, manufactures and sells nitrogen generators and vents, including but not limited to the *ECS Protector Nitrogen Generator System*, *ECS Protector Manual Vent*, *ECS Protector SMART Nitrogen Cylinder System*, and the *ECS Protector Nitrogen Inerting Vent*, among others, for use in fire sprinkler systems, including preaction systems. ECS also designs, manufactures and sells an array of other products and methods for monitoring and preventing corrosion in water-based fire sprinkler

systems. ECS designs, manufactures and sells its products within this judicial district and throughout the United States, including this judicial district. The members of ECS reside in this district.

3. Upon information and belief, Defendant South-Tek Systems, LLC is a North Carolina limited liability company having a principal place of business at 2940 Orville Wright Way, Wilmington, NC 28405.

JURISDICTION AND VENUE

4. This is a civil action for patent infringement arising under the patent laws of the United States, 35 U.S.C. §§1, *et seq.* This Court has original subject matter jurisdiction under 28 U.S.C. §§1331, 1332 and 1338(a).

5. Defendant South-Tek is subject to personal jurisdiction in this judicial district, at least because ECS's claims for patent infringement against South-Tek arise from South-Tek's acts of infringement in the State of Missouri and the Eastern District of Missouri. Specifically, South-Tek directly infringed, contributed to the infringement of and induced the infringement of the '533 Patent. The acts of infringement included and include, but are not limited to, making, using, selling, offering to sell, and otherwise making available to contractors and end users, directly and/or through third parties, including but not limited to distributors and contractors, infringing products, including but not limited to preaction fire sprinkler system corrosion prevention systems, such as the N₂-Blast® – Corrosion Inhibiting System; nitrogen generators for use in preaction fire sprinkler systems, such as the N₂-Blast® Nitrogen Generator and the N₂-Blast® FPS Nitrogen Generator, and vents for use in preaction fire sprinkler systems, such as the N₂-Blast® AutoPurge™ System. South-Tek also placed and places infringing products into the stream of commerce through an established distribution channel with full awareness that said

products would be and have been shipped into and sold from and in and into this district. South-Tek also intends that its infringing products be sold in this district. South-Tek also operates an interactive website facilitating the sale of, offering for sale of and otherwise making available, directly and/or through third parties, infringing products in the State of Missouri and this District. Upon information and belief, South-Tek also does business throughout the United States and, in particular, does regular business within this judicial district.

6. For example, according to South-Tek's website, <http://www.southteksystems.com/history.asp> (Ex. 2), South-Tek was founded in 1997 and claims to be one of the largest manufacturers of nitrogen generation equipment "with over 8,000 systems installed in the United States and abroad." It also claims that it supplies its products for use in existing and newly designed and installed fire sprinkler systems throughout the United States. See, for example, <http://www.southteksystems.com/n2-blast-industry-overview.asp> (Ex. 3).

7. South-Tek also operates and maintains an interactive website which offers for sale and facilitates the sale of infringing products in the State of Missouri and the Eastern District of Missouri, <http://www.southteksystems.com/obtain-pricing.asp> (Ex. 4). Specifically, South-Tek's website provides prospective customers with detailed information about its products and provides a means by which South-Tek customers, including those in this District, can obtain pricing information from South-Tek. On its "Get Pricing" website page, South-Tek states that it is "happy to provide a proposal to meet any of your Nitrogen Applications including a free cost analysis" and directs visitors to "fill out the form below so we can serve your Nitrogen needs." For "immediate assistance", prospective customers are encouraged to call a toll free number, (888) 526-6284.

8. South-Tek also distributes its products, including infringing products, through established channels of distribution, namely distributors, with full awareness that substantial quantities of its products, including N₂-Blast® Nitrogen Generators and N₂-Blast® AutoPurge™ System vents for use with preaction fire sprinkler systems, are likely to be and have been shipped into the State of Missouri and the Eastern District of Missouri. Several such distributors have principal places of business in the Eastern District of Missouri and advertise South-Tek's fire sprinkler system products, including infringing products, in this district. Several such distributors also sell South-Tek infringing products in this district over the Internet through websites capable of e-commerce transactions.

9. For example, Orr Protection Systems ("Orr") is a South-Tek distributor of South-Tek infringing products, including N₂-Blast® Nitrogen Generator and N₂-Blast® AutoPurge™ System vents, and has a principal place of business in this District at 4132 Shoreline Drive, Suite G, Earth City, MO 63045. Orr Protection Systems' website depicts a "South-Tek Systems" page of "Fire Protection Nitrogen Generator" information. Orr's website page states that South-Tek "engineers and manufactures N2Blast Nitrogen Gas Generators designed to fight corrosion in dry and preaction sprinkler fire suppression systems." Under the heading of "System Details," Orr states that it will "furnish and install" South-Tek's "Corrosion Inhibiting Nitrogen Generation System that will include at least "a N₂-Blast® FPS Nitrogen Generator" and "Fire Protection System Purging Device(s)." The page also contains a visual depiction of the N₂-Blast® FPS 3000 Nitrogen Generator. The website page can be found at <http://www.orrprotection.com/manufacturers/south-tek-systems/> and a printed copy is attached as Exhibit 5.

10. Venue is proper in this district pursuant to 28 U.S.C. §§1391(b) and 1400(b). South-Tek is a resident of this district within the meaning of 28 U.S.C. §1391(c) and (d) and/or a substantial part of the events giving rise to the claims herein occurred in this district.

THE ASSERTED '533 PATENT

11. ECS expended and expends significant time and money each year in the research and development of new and novel methods, products and systems for fire sprinkler systems, including developing the use of nitrogen generators and vents to prevent corrosion in preaction fire sprinkler systems. A preaction fire sprinkler system is constructed from piping connected to a water supply, sprinkler heads and one or more valves that control the release of water into the piping when the system is actuated, such as by fire. Fire sprinkler system pipes, including piping networks in preaction fire sprinkler systems, can rust and corrode over time. Corrosion occurs when pressurized oxygen found within preaction fire sprinkler system pipes chemically combines with the iron in the pipes. This chemical combination is facilitated when said oxygen dissolves in water. Oxygen is typically found in the air used to pressurize preaction fire sprinkler pipes and water is typically found in the pipes, even when the pipes are not filled with water, from testing residue and/or condensation. Thus, typical preaction fire sprinkler piping networks are always corroding.

12. ECS's efforts, innovation and expense led to filing an application with the U.S. Patent Office for issuance of a patent on an invention to reduce, inhibit and prevent corrosion in preaction fire sprinkler pipes. On November 17, 2015, ECS's application was granted and the United States Patent Office duly and legally issued U.S. Patent No. 9,186,533 ("the '533 Patent") entitled "*Fire Protection Systems Having Reduced Corrosion*" (Ex. 1). Each claim of the '533 Patent is valid and enforceable.

13. The invention claimed in the '533 Patent reduces, inhibits and prevents such corrosion of iron pipe networks in preaction fire sprinkler systems by replacing and displacing the pressurized oxygen found in said piping networks with pressurized nitrogen and providing at least one vent to allow the displaced oxygen to exit the piping network. Nitrogen is an inert gas, which means that it has very low chemical reactive properties, and therefore does not cause corrosion. By way of example, and paraphrasing, independent claim 1 of the '533 Patent claims a water-based fire protection system, said system comprising a preaction sprinkler system, a nitrogen generator coupled to the piping network of the preaction sprinkler system to pressurize the piping with nitrogen, and at least one vent positioned within said network to allow gas, including oxygen, displaced by nitrogen to exit the piping without actuating the sprinkler system. Making the system recited by claim 1 of the '533 Patent involves coupling a nitrogen generator to the piping network of a preaction fire sprinkler system and positioning a vent within the piping network. The vent allows gas, including oxygen displaced by the nitrogen, to exit the pipes. Deprived of oxygen to chemically combine with iron, corrosion is reduced, inhibited and prevented.

14. ECS is the sole owner by assignment of the entire right, title, and interest in the '533 Patent, including the right to sue for and recover injunctive relief and past, present and future damages for any and all infringement of the '533 Patent.

COUNT I

(CONTRIBUTORY, INDUCED AND DIRECT INFRINGEMENT OF THE '533 PATENT)

15. ECS incorporates by reference paragraphs 1 through 14 as though fully set forth herein.

16. South-Tek makes, uses, sells, offers to sell, and otherwise makes available nitrogen generator products and vent products for use with preaction fire sprinkler systems, which products, when used with a preaction fire sprinkler system, infringe the '533 Patent. At least one such infringing product is a nitrogen generator that South-Tek markets under the brand name "N₂-Blast® – Nitrogen Generator." Another infringing product is a vent that South-Tek markets under the brand name "AutoPurge™ System." South-Tek also advertises an "N₂-Blast® – Corrosion Inhibiting System" that includes, but is not limited to, the "N₂-Blast® – Nitrogen Generator", N₂Blast® FPS Nitrogen Generators and the "AutoPurge™ System." South-Tek further advertises that its products are for use in "preaction Fire Protection Systems, Designed and Manufactured by South-Tek Systems, the leader in Nitrogen Generation Technology." Under the heading "How it works", South-Tek's website advertising material states that the "N₂-Blast® – Nitrogen Generator" produces nitrogen and introduces it to a preaction fire protection system thereby displacing oxygen from the piping through the "AutoPurge™ System" to inhibit corrosion. Accordingly, when the N₂-Blast® Corrosion Inhibiting System products are installed and used in a preaction fire sprinkler system, whether by South-Tek, a distributor, a contractor or an end user, at least claim 1 of the '533 Patent is infringed by South-Tek.

17. South-Tek markets its products to be connected to existing or new preaction fire sprinkler systems and instructs and encourages distributors, contractors, other customers and end users to use them with such systems to remove oxygen from piping networks to prevent corrosion. Evidence of such conduct can be found, among other places, on South-Tek's website and in its brochures, manuals, instruction guides, product guides, schematic documents and guide specifications. *See*, for example, <http://www.southteksystems.com/n2-blast-industry-overview.asp> (Ex. 3) and <http://www.southteksystems.com/n2-blast-general-information.asp> (Ex.

6). Another example of South-Tek's conduct which contributes to infringement of the '533 Patent and induces downstream distributors, contractors, other customers and end users to infringe the '533 Patented system is South-Tek's "Guide Specification" in the "Engineering Toolbox" section of its website. Said "Guide Specification" is an installation guide for fire sprinkler system contractors which instructs said contractors to install South-Tek N2-Blast® nitrogen generators and AutoPurge™ brand vents as part of an existing or new preaction fire sprinkler system. South-Tek's website also touts its emphasis on customer support "providing the end user seamless operation and highest return on investment." Ex. 2.

18. South-Tek makes, uses, sells, offers to sell, and otherwise makes available, and continues to do so, infringing products including the N₂ Blast® Corrosion Inhibiting System products, with knowledge of both the '533 Patent and the fact that its N₂ Blast® Corrosion Inhibiting System products, when used in a preaction fire sprinkler system, infringed and infringe at least one claim of the '533 Patent. ECS's corrosion prevention products were and are marked with the '533 Patent number.

19. South-Tek unlawfully infringed and infringes indirectly, literally and under the doctrine of equivalents, in violation of Title 35, United States Code, Section 271(c), the '533 Patent by contributing to direct infringement of said patent by another. South-Tek makes, uses, sells, offers to sell, and otherwise makes available products, including but not limited to South-Tek's N₂ Blast® Corrosion Inhibiting System nitrogen generator and vent products, which are important and material components of the system claimed in the '533 Patent, for use in practicing the invention claimed in the '533 Patent, including without limitation at least claim 1. South-Tek did so and does so with knowledge of the '533 Patent and knowledge that said products are especially made or especially adapted for use in infringement of said patent. Said

products are not a staple article or commodity of commerce suitable for substantial non-infringing use.

20. South-Tek also unlawfully infringed and infringes indirectly, literally and under the doctrine of equivalents, in violation of Title 35, United States Code, Section 271(b), the '533 Patent by actively and intentionally inducing another to directly infringe said patent, with knowledge of said patent and knowledge that its acts caused and cause another to infringe said patent. South-Tek induced another to make, use, sell, offer to sell, and otherwise make available products and/or systems that infringe one or more claims of the '533 patent, including without limitation at least claim 1. South-Tek's acts of inducement included but are not limited to instructing, aiding, assisting, authorizing, advertising, marketing, promoting, supplying, encouraging, and otherwise acting with the intent to cause another to directly infringe the '533 Patent.

21. On information and belief, South-Tek infringed and infringes directly, literally and under the doctrine of equivalents, in violation of Title 35, United States Code, Section 271(a), one or more claims of the '533 Patent, including without limitation at least claim 1. South-Tek makes, uses, sells, offers to sell, and otherwise makes available the system claimed by the '533 Patent. Upon information and belief, South-Tek tested and tests the N₂-Blast® Corrosion Inhibiting System products and other infringing products.

22. On information and belief, South-Tek's acts of infringement of the '533 Patent have been willful and intentional. South-Tek is, and has been, specifically aware of: the owner of the asserted patent, ECS, and the inventors of the patent-in-suit; ECS's business, including its products, customers and potential customers; ECS's patent portfolio; and ECS's '533 Patent markings on its competing preaction fire sprinkler corrosion prevention products. South-Tek has

specific knowledge of the '533 Patent since it was issued and at the latest when it was notified of the filing of this Complaint, received a copy of this Complaint or served with a copy of this Complaint. On information and belief, South-Tek's history in the relevant industry, the relatively few manufacturers in this technology space, prior dealings with ECS, ECS's marking of its products with the '533 Patent number, South-Tek's patent activity in this technology space and South-Tek's legal challenge to another ECS patent, gave South-Tek knowledge of the '533 Patent since its issue date. Since learning of the '533 Patent, South-Tek has disregarded said knowledge and there is an objectively high likelihood that its actions constituted and constitute infringement of the '533 Patent.

23. South-Tek's infringing acts described herein were and are without right, license or permission from ECS.

24. South-Tek's contributory infringement, inducement of infringement and direct infringement of the '533 Patent have injured ECS and ECS is entitled to recover damages adequate to compensate ECS for such harmful infringement, but in no event less than a reasonable royalty.

25. As a result of South-Tek's acts, ECS is entitled to damages under 35 U.S.C. § 284.

26. ECS has been and will continue to be irreparably harmed if South-Tek's infringing activities are not enjoined.

27. South-Tek's infringement of the '533 Patent has caused and will continue to cause substantial and irreparable injury and damage to ECS, including harm within this judicial district, without an adequate remedy at law, unless this Court enters an injunction prohibiting further

infringement and, specifically enjoining further direct, contributory and induced infringement of the '533 Patent.

PRAYER FOR RELIEF

WHEREFORE, ECS requests a judgment in its favor and against Defendant South-Tek Systems, LLC and requests that this Court:

A. Order, adjudge and decree that South-Tek is liable for infringement of at least one claim of U.S. Patent No. 9,186,533;

B. Enter judgment in favor of ECS and against South-Tek;

C. Issue an injunction prohibiting South-Tek, and each of its respective subsidiaries, officers, agents, servants and employees, directors, licensees, successors, assigns, and those persons in active concert or participation with any of them, from further direct infringement, contributory infringement and inducement of infringement by making, using, selling, offering to sell and/or otherwise making available any product and/or system that infringes any claim of U.S. Patent No. 9,186,533;

D. Award damages adequate to compensate for ECS's losses caused by the wrongful and infringing activities of Defendant, but in no event less than a reasonable royalty as permitted by Title 35, United States Code, Section 284, together with prejudgment interest from the date infringement began;

E. Increase damages and/or award attorney's fees as permitted under Title 35, United States Code, Sections 284 and 285; and

F. Award such further relief as this Court may deem just and proper.

JURY DEMAND

ECS demands a trial by jury of all issues triable to a jury.

Dated: January 25, 2016

HARNESS, DICKY & PIERCE, P.L.C.

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