SCR-Tech LLC v. Evonik Energy Servs. LLC, 2011 NCBC 26.

STATE OF NORTH CAROLINA COUNTY OF MECKLENBURG

IN THE GENERAL COURT OF JUSTICE SUPERIOR COURT DIVISION 08 CVS 16632

SCR-TECH LLC,

Plaintiff,

v.

EVONIK ENERGY SERVICES LLC, EVONIK ENERGY SERVICES GMBH, EVONIK STEAG GMBH, HANS-ULRICH HARTENSTEIN, and BRIGITTE HARTENSTEIN,

Defendants.

ORDER AND OPINION (REDACTED VERSION)

{1} THIS MATTER is before the Court on Defendants' Joint Motion for Summary Judgment on the Non-Existence of Trade Secrets or Confidential Information ("Motion"), filed pursuant to Rule 56 of the North Carolina Rules of Civil Procedure. For the reasons stated below, the Motion is GRANTED IN PART AND DENIED IN PART.

King & Spalding LLP, by Timothy G. Barber, Antonio E. Lewis for Plaintiff SCR-Tech LLC.

Alston Bird LLP by Mark Vasco, Benjamin F. Sidbury, Scott Stevens, and Debra Lofano for Defendants Evonik Energy Services GmbH and Evonik Steag GmbH.

K&L Gates LLP by Beverly A. Carroll and Daniel v. Mumford for Defendants Evonik Energy Services LLC, Hans-Ulrich Hartenstein, and Brigitte Hartenstein.

I. INTRODUCTION

{2} Plaintiff SCR-Tech LLC ("SCR-Tech") and Defendant Evonik Energy Services LLC ("Evonik") are the only two companies in the business of Selective Catalytic Reduction ("SCR") in the United States at relevant times. SCR-Tech claims that Evonik misused SCR-Tech's protected information, consisting of both

trade secrets and confidential information, to enter the American market. The Motion attacks these claims on the basis that any information that SCR-Tech seeks to protect has been publicly disclosed. SCR-Tech, in turn, claims that facts based on limited discovery defeat the Motion and there are other material factual issues that preclude determining the claims summarily.

{3} The Court finds that there are some material issues which it cannot determine summarily, but that undisputed facts allow the claims to be narrowed, and specifically to exclude from claimed trade secrets that information which has been sufficiently disclosed publicly to preclude protection.

II. PROCEDURAL BACKGROUND

- 44 SCR-Tech filed this action in Mecklenburg County on July 30, 2008, and amended its Complaint on August 29, 2008, to correct a clerical error. Its claims include breach of contract, breach of fiduciary duty, and usurpation of corporate opportunities by Hans-Ulrich and Brigitte Hartenstein (collectively, "the Hartensteins"), tortious interference by Evonik, and misappropriation of trade secrets and unfair and deceptive trade secrets by all Defendants. On October 1, 2008, Evonik answered and asserted counterclaims for defamation/trade libel, abuse of process, and unfair and deceptive trade practices. The Hartensteins answered some claims but filed a Rule 12(b)(6) motion to dismiss the claims of breach of fiduciary duty and usurpation of corporate opportunity.
- {5} The case was assigned to this Court after these initial motions. Subsequently, Defendants Evonik Energy Services GmbH, Evonik Steag GmbH, and Evonik Industries AG (collectively, "the German Defendants") moved to dismiss all claims against them pursuant to Rule 12(b)(6), and Evonik Industries AG moved to dismiss all claims pursuant to Rule 12(b)(2). By Order dated May 6, 2009, Judge Ben F. Tennille granted Evonik Industries AG's Rule 12(b)(2) motion and the Hartensteins' Rule 12(b)(6) motion. The Hartensteins then counterclaimed, alleging defamation and unfair and deceptive trade practices. The remaining German

Defendants filed counterclaims asserting unfair and deceptive trade practices and requesting a declaratory judgment.

(6) On September 1, 2009, SCR-Tech provided its Second Amended Response to Defendant Evonik Energy Services LLC's Interrogatory No. 1, pursuant to the Court's requirement that SCR-Tech identify its claimed trade secrets.¹ By Order dated December 30, 2009, Judge Tennille found that Plaintiff had sufficiently identified its claimed trade secrets to justify discovery moving forward. On February 25, 2010, Defendants filed their Joint Motion for Summary Judgment on the Issues of Statute of Limitations, Release, and Lack of Standing, as well as the Motion which is the subject of this Order and Opinion. On July 12, 2010, Judge Tennille issued an Order denying the first motion but holding this Motion in abeyance pending further development of a factual record based on limited discovery specified in his Order, relating primarily to AES Somerset, SCR-Tech's former customer and the customer through which Evonik entered the United States market.² Plaintiff and Defendants filed supplemental memoranda following this discovery. The Court then heard oral argument based on the discovery and supplemental memoranda.

III. FACTUAL BACKGROUND

{7} The Court does not make findings of fact on contested issues in reaching its ruling on a motion for summary judgment, but it appropriately recites established facts as background for its rulings. The facts are stated from that

¹ This document, which the Court will refer to as "Plaintiff's Disclosure," was filed under seal. While the document would be available, as necessary, for any appellate process, the Court refers to its disclosure only generally and as necessary to resolve the pending Motion. In some instances, more particular information from the document is detailed in endnotes, which are indicated by Roman numerals and which are attached to the sealed version of this Order and Opinion.

² Judge Tennille allowed discovery on Evonik's independent development. The Motion addresses the issue of whether SCR-Tech's information has been publicly disclosed so as to lose any protection, but it does not seek to adjudicate any affirmative defense based on independent development. Judge Tennille's intent was to allow initial inquiry as to independent development as it might inform whether SCR technology sufficient to enter the American market was easily available to Evonik without any misappropriation.

perspective, and, except where areas of material factual disputes are noted, the Court believes the facts to be uncontested.³

A. The Parties

- \{8\} SCR-Tech is a North Carolina corporation, having its principal place of business in Mecklenburg County. It was formed in May 2001 as an American subsidiary of a German company, SCR-Tech GmbH, to engage in the business of cleaning and regenerating SCR catalysts and to provide consulting services related to SCR system operations. SCR-Tech GmbH was formed by two German companies, Envica Kat GmbH ("Envica") (now Ebinger Katalysatorservice GmbH ("Ebinger")), an SCR technology company, and Energy & Environmental Consultants GmbH, a German consulting company owned by the Hartensteins. Prior to forming SCR-Tech, Envica had been active in the European SCR market but had no SCR operations in the United States. In March 2002, the German company EnBW Energy Solutions GmbH ("EnBW") became a shareholder of SCR-Tech GmbH, and in 2003, it became a direct shareholder of SCR-Tech. Envica granted SCR-Tech through its German parents a license for Envica's patented SCR catalyst regeneration technologies for use in North America.
- {9} The corporate defendants are related. Evonik is a North Carolina corporation, having its principal place of business in Craven County. It cleans and regenerates SCR catalysts and provides engineering and consulting services related to the operation of power plants. Plaintiff alleges that Evonik is an American subsidiary of Evonik Energy Services GmbH, which, allegedly, is a subsidiary of Evonik Steag GmbH. Plaintiff alleges that Evonik Steag GmbH is a subsidiary of Evonik Industries AG. These related entities are each located in Essen, Germany and together have significant capabilities in chemical and power generation industries.

³ See Capps v. City of Raleigh, 35 N.C. App. 290, 292, 241 S.E.2d 527, 529 (1978).

{10} The Hartensteins entered into employment agreements with SCR-Tech on December 31, 2001. The agreements include covenants against competition. Their employment terminated in March 2005. They executed the Settlement Agreement and Mutual Release (the "Settlement Agreement") with SCR-Tech in December 2005, eliminating the covenants against competition but including confidentiality agreements. Hans-Ulrich Hartenstein was SCR-Tech's President. He is now Evonik's President. Brigitte Hartenstein was SCR-Tech's Vice President of Contract Management and Chief Financial Officer. She is now Evonik's Chief Financial officer.

B. The SCR Process

{11} Selective Catalyst Reduction is a chemical process by which harmful nitrogen oxide contained in coal-burning power plants' exhaust gas is converted into harmless nitrogen gas and water.⁴ Nitrogen oxide causes acid rain and smog,⁵ and power plants are required to control its release into the environment. Ammonia is sprayed into a power plant's combustion gases.⁶ The ammonia mixture then contacts numerous SCR catalysts, which generally consist of a ceramic carrier and active catalytic components.⁷ SCR catalysts contain certain metal atoms that help break the atomic bonds in the nitrogen oxide molecules.⁸

{12} Coal naturally contains small amounts of various elements, such as arsenic, sodium, potassium, and phosphorous.⁹ These elements appear in coal burning exhaust flumes.¹⁰ Over time, SCR catalysts become unusable because they

⁴ (Defs.' Mem. in Supp. of Their Joint Mot. for Summ. J. on the Non-existence of Trade Secrets or Confidential Information ("Defs.' Summ. J. Br.") 5; Pl.'s Mem. in Resp. to Defs.' Joint Mot. for Summ. J. ("Pl.'s Resp. Br.") 3.)

⁵ (Defs.' Summ. J. Br. 5; Pl.'s Resp. Br. 3.)

⁶ (Defs.' Summ. J. Br. 5.)

⁷ (Pl.'s Resp. Br. 3.)

^{8 (}Defs.' Summ. J. Br. 6, 7.)

⁹ (Defs.' Summ. J. Br., Ex. G: SCR-Tech Website Publication from the 2001 EPRI Workshop on Selective Catalyst Reduction: "Catalyst Regeneration—An Integral Part of Proper Catalyst Management" ("Ex. G") at 2.) Exhibit G provides a broad description of the SCR process and details steps in SCR-Tech's process.

¹⁰ (Ex. G at 2.)

become plugged with undesirable compounds as well as with particulate matter called "fly ash." ¹¹ Power companies may either purchase new SCR catalysts or, at less cost, clean and regenerate the used catalysts. ¹² Without more, cleaning merely removes the physical pluggage; regeneration includes re-impregnating the catalyst with the metals that facilitate the desired chemical reaction. ¹³ SCR-Tech's process cleans and regenerates SCR catalysts in an economically sustainable process for reuse in its customers' power plants. ¹⁴

{13} SCR technology was invented and originally patented in the 1950s. ¹⁵ The SCR catalyst type used today was invented in Japan in the 1980s. ¹⁶ SCR-Tech's process has its roots in more current technology developed in Germany in the mid-1990s. ¹⁷ At that time, EnBW, Plaintiff's future shareholder, developed a cleaning and rejuvenation process to be conducted on-site at power plants. ¹⁸ Envica (now Ebinger) created a method for cleaning, rejuvenating, and regenerating SCR catalysts, and, in 1997, partnered with a German utility to develop an off-site process that could restore up to 100% of the catalysts' initial activity. ¹⁹ This Envica (or Ebinger) process has been commercialized throughout Germany, and Ebinger has captured more than 90% of the regeneration market there. ²⁰ Its main competitor in the German market is Integral Engineering und Umwelttechnik GmbH ("Integral"). The Defendant Evonik companies have secured a license from Integral.

{14} From 2001 through 2003, SCR-Tech focused on establishing an American market presence and building a regeneration facility in Charlotte, North

¹¹ (Ex. G at 2.)

¹² (Ex. G at 2, 4, 10.)

¹³ (Defs.' Summ. J. Br., Ex. H: SCR-Tech Website Publication from the American Coal Conference: "Reduction of SO₃: Minimizing SO₂ Oxidation with SCR Regenerated Catalyst" ("Ex. H") at 9; Ex. G at 7.)

¹⁴ (Ex. G at 4-5.)

^{15 (}Defs.' Summ. J. Br. 8.)

¹⁶ (*Id.*)

¹⁷ (Pl.'s Resp. Br. 4.)

^{18 (}*Id.*)

¹⁹ (*Id.* at 5.)

^{20 (}Ex. G at 8.)

Carolina. SCR-Tech hired the Hartensteins as officers to spearhead its market entry. SCR-Tech's employees initially learned, developed, and refined the baseline Envica process for use with American power plants. Hans Hartenstein, along with two other SCR-Tech employees, travelled to Germany to learn Envica's process. They worked closely with three key Envica employees, Dr. Alex Schlutting, Maik Blohm, and Marcel Förster. Hese three German employees worked for Envica or its predecessors from 2000 to 2004, and each signed an agreement containing a confidentiality provision which protects "business and operational matters of other companies with which [Envica] is economically and/or organizationally linked[,]" including SCR-Tech. In January 2003, SCR-Tech GmbH, secured a license of Envica's process which allows SCR-Tech to use Envica's technologies in North America.

{15} SCR-Tech published the primary steps of the Envica process it uses in public internet publications.²⁷ The steps include:

- 1) Mechanical cleaning;
- 2) Soaking and washing at a controlled pH, temperature, and chemical composition;
- 3) Ultrasonic treatment at a controlled pH, temperature, and chemical composition;
- 4) Neutralization;
- 5) Multi-step rinsing;
- 6) Drying prior to re-impregnation;
- 7) Replenishment and re-impregnation with catalytically active compounds;
- 8) Final Drying; and
- 9) Final inspection and packaging for shipment.

²¹ (Pl.'s Resp. Br. 6.)

²² (*Id.*, Ex. A: Aff. of Frank Wenz ("Wenz Aff.") ¶ 12.)

²³ (Wenz Aff. ¶ 11.)

²⁴ (Wenz Aff. ¶¶ 11, 12, 13.)

²⁵ (Pl.'s Resp. Br., Ex. C: Aff. of Frank Ebinger ¶ 17, Ex. 4: Service Agreement between Envica Kat GmbH and Maik Blohm ¶ 8.2, Ex. 12: Service Agreement between Envica Kat GmbH and Marcel Förster ¶ 8.2.)

²⁶ (Am. Compl. ¶ 21; Answer of Hans Hartenstein ¶ 21.)

²⁷ (See Ex. G at 8–9; Ex. H at 9.) These publications generally list the process with six numbered steps. The Court expands the list to nine steps to facilitate a comparison between SCR-Tech's trade secret disclosures and Defendants' claims that the steps have each been publicly disclosed.

{16} Before SCR-Tech begins a regeneration process for a particular power plant, it tests the customer's catalysts to determine deactivation causes and then tailors the regeneration process for that particular customer.²⁸ SCR-Tech has learned through trial and error that the basic Envica process SCR-Tech's employees learned from Envica required refinement because of properties unique to American coal.²⁹ SCR-Tech has altered the baseline Envica process in specific ways to yield commercially beneficial results.

- C. SCR-Tech is Sold and the Hartensteins' Employment Terminates
- {17} In January 2004, SCR-Tech's parent, SCR-Tech GmbH, was purchased by Catalytica Energy Systems, Inc., which is the parent company of CESI-SCR, Inc., which acquired SCR-Tech and its intellectual property rights. The Hartensteins notified SCR-Tech on February 15, 2005 that they would terminate their employment agreements. On March 18, 2005, SCR-Tech terminated the Hartensteins on the assertion that they had violated their employment agreements.³⁰ Hans and Brigitte Hartenstein each testified that they took documents upon their departure from SCR-Tech.³¹ The Hartensteins began working with Evonik on April 8, 2005. Hans Hartenstein was promoted to President of Evonik in March 2006.³² Brigitte Hartenstein became CFO of Evonik in 2007.³³
- {18} The Settlement Agreement between the Hartensteins and SCR-Tech eliminated the non-compete provision contained in the employment agreements and contains a Confidentiality Agreement, which provides in pertinent part:

²⁸ (Ex. G. at 3-4.)

²⁹ For example, SCR-Tech detailed in affidavit how it learned that modifying the process steps would improve catalyst efficiency. (See Wenz Aff. ¶¶ 15–17.)

 $^{^{30}}$ (Defs.' Summ. J. Br., Ex. I: Settlement Agreement and Mutual Release ("Settlement Agreement") \P 2.4.)

³¹ (Pl.'s Supplemental Mem. Opposing Defs.' Joint Mot. for Summ. J. ("Pl.'s Supplemental Br."), Ex. G: Aff. of Antonio Lewis ("Lewis Aff."), Attach. 5: Dep. of Hans-Ulrich Hartenstein ("Hartenstein Dep.") 20:30–23:15, Attach. 17: Dep. of Brigitte Hartenstein 17:5–18:2.)

^{32 (}Pl.'s Resp. Br., Ex. D: Def. Hans-Ulrich Hartenstein's Resp. to Pl.'s Am. First Set of Interrogs. ¶ 6.)

^{33 (}Pl.'s Resp. Br., Ex. E: Def. Brigitte Hartenstein's Resp. to Pl.'s Am. First Set of Interrogs. ¶ 6.)

The Hartensteins agree, now and hereafter, to hold in strictest confidence, and not to use or to disclose to other persons or entities without the written consent of SCR-Tech, any confidential information of SCR-Tech. The Hartensteins understand that "Confidential Information" means any SCR-Tech proprietary information, technical data, trade secrets or know-how, including but not limited to test results and reports, software, developments, inventions, processes, formulas (including but not limited to any recipes, formulae, and chemical lists related to SCR-Tech's SCR catalyst cleaning. regeneration or rejuvenation processes that were either developed by SCR-Tech or made available to SCR-Tech by EnBW Energy Solutions GmbH and/or [Envica]), technology, designs, drawings, engineering, hardware configuration information, financial results and projections. The Hartensteins further understand that Confidential Information includes all non-public information regarding any interests or assets transferred by ENVICA GmbH, [Envica], E&EC, Energy & Environmental Consultants GmbH, EnBW Energy Solutions GmbH, and SCR-Tech GmbH to SCR-Tech, LLC, CESI-SCR, Inc., and CESI-Tech Technologies, Inc. as well as any non-public information obtained during the due diligence process performed by CESI as part of the transaction that is the subject of this resolution. The Hartensteins further understand that Confidential Information does not include any of the foregoing items:

- (a) which have become generally known publicly or otherwise through no wrongful act of the Hartensteins or of others who were under confidentiality obligations as to the item or items involved.
- (b) which have been known by the Hartensteins prior to its disclosure by SCR-Tech.
- (c) which have been or are subsequently disclosed to the Hartensteins by a third party who did not acquire such information under an obligation of confidentiality from or through SCR-Tech.
- (d) which the Hartensteins independently developed without the use of Confidential Information as demonstrated by written evidence of independent development.³⁴

The Confidentiality Agreement also states:

The Hartensteins agree that they shall take reasonable measures to protect the secrecy of and avoid disclosure of all such Confidential

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^{34 (}Settlement Agreement 23.)

Information. The Hartensteins hereby represent and warrant that they have not, since January 21, 2004, engaged in any act(s) that would have constituted a violation of the terms of this Confidentiality and Invention Assignment Agreement had it been in effect from such time through the present.³⁵

{19} Paragraph 3.0 of the Confidentiality Agreement, entitled "Acknowledgement of Return Materials," provides:

The Hartensteins herein acknowledge that they have conducted a complete search for and turned over any information that was the property of SCR-Tech at the time of the termination of their employment with SCR-Tech.³⁶

- D. Evonik's SCR Regeneration Process and Its Entry into the American Market
- {20} Evonik's predecessors and affiliates cleaned and regenerated SCR catalysts in laboratories for testing purposes in the early 1990s.³⁷ Before 2005, Evonik had no commercialized process. Rather, it had Envica regenerate its SCR catalysts, which Evonik believed to be cost efficient.³⁸ In January 2005, Hans Hartenstein served as both President of SCR-Tech and as a consultant to Evonik. He advised SCR-Tech at this time that Evonik had no interest in entering the SCR catalyst market.³⁹ Evonik states that it formed its intent to enter the SCR catalyst market in 2005 in response to Envica having a problem with non-toxic SO₂ being converted into highly toxic SO₃ by its process ⁴⁰
- {21} Evonik denies that it depended on or needed access to SCR-Tech's trade secrets or confidential information to enter the market. It contends, rather, that it

^{35 (}*Id.*)

³⁶ (*Id.*)

³⁷ (Defs.' Supplemental Mem. in Supp. of Their Joint Mot. for Summ. J. on the Non-existence of Trade Secrets or Confidential Information ("Defs.' Supplemental Br."), Ex. 2: Aff. of Hermann Brüggendick, Head of Environmental Technologies for Evonik Energy Services GmbH ("Brüggendick Aff.") ¶¶ 3, 4.)

 $^{^{38}}$ (Defs.' Supplemental Br., Ex. 1: Aff. of Ralf Gilgen, CEO, Evonik Energy Services GmbH ("Gilgen Aff.") $\P\P$ 6, 11; Brüggendick Aff. \P 5.)

³⁹ (Lewis Aff., Attach. 4: E-mail from Hans Hartenstein to Dominic Garaghty (Jan. 14, 2005, 1607).) ⁴⁰ (Gilgen Aff. ¶ 8.) A high SO₂/SO₃ conversion rate can cause failures in power plant equipment and environmental problems like acid rain. (*Id.*) Envica's apparent solution was to decrease the activity rate of the catalyst, which decreases its overall efficiency. (*Id.* ¶ 9.) Evonik claims this solution would not meet its service needs.

had numerous sources from which to develop its catalyst regeneration capability. It claims it had technical regeneration knowledge before Hans Hartenstein's employment because of the earlier laboratory work, and, further, because one of its affiliates received detailed information from Envica regarding Envica's process as early as 2001 as a part of an effort to denitrify the flue gases from its power plants. Evonik also stresses that it obtained a license for catalyst regeneration technology and catalyst cleaning and regeneration know-how from Integral.⁴¹ The license requires a royalty fee for each catalyst regeneration using Integral's "wash process." Evonik further claims that it appropriately obtained know-how from former Envica employees and a chemist. Finally, Evonik claims that Hans Hartenstein was able to provide his "extensive know-how regarding . . . catalyst regeneration" independent of any confidentiality obligations to SCR-Tech.⁴³

{22} In August 2005, Ralf Gilgen, CEO of Evonik Energy Services GmbH, entered a consulting contract with Maik Blohm, the former Envica plant manager who had personally trained Hans Hartenstein and other SCR-Tech employees on catalyst regeneration. 44 Gilgen did so at Hans Hartenstein's urging. 45 Hans Hartenstein acknowledged that Evonik needed "someone to adapt the Steag process to North American coals" and "North American catalyst issues," and "that need[ed] to be done very quickly." 46 Hans Hartenstein knew that Blohm had helped train SCR-Tech's employees and that he had traveled to North Carolina to help SCR-Tech launch its plant and adapt the general Envica process to the unique contaminants contained in North American coal. 47 Evonik also hired Marcel Förster, the former Envica chemist who had trained SCR-Tech's employees.

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⁴¹ (*Id.* ¶ 11.)

^{42 (}Id. ¶ 12, Tab 4: Licensing Agreement at PROD0000818.)

^{43 (}Lewis Aff., Attach 3: Proposal at EES017005.)

⁴⁴ (*Id.*; Lewis Aff., Attach. 3: Proposal by the Executive Bd. of Steag encotec GmbH ("Proposal") at EES017005.)

⁴⁵ Hartenstein Dep. 78:6-79:3.)

^{46 (}*Id.* at 55:23–56:9.)

⁴⁷ (Pl.'s Supplemental Br., Ex. I: Aff. of Dr. Alexander Schluttig ¶ 13.)

{23} Envica and its predecessors had a policy to require that all employees with access to proprietary information execute confidentiality agreements.⁴⁸ Prior to April 2004, Envica's employment agreements contained provisions requiring that employees maintain the confidentiality of "internal corporate matters."⁴⁹ On April 2, 2004, Blohm and Förster executed Envica employment agreements, which contained provisions requiring that they:

maintain the strictest secrecy about all operational and business matters and processes of [Envica] which become known to [them] in [their] work and its surrounding circumstances both during the employment relationship and after its termination. This duty to maintain confidentiality also covers business and operational matters of other companies with which [Envica] is economically and/or organizationally linked 50

According to Defendants, Blohm and Förster thereafter provided Evonik their "entire know-how and . . . expertise." ⁵¹

{24} SCR-Tech claims a right to enforce these agreements such that Blohm and Förster are precluded from sharing any trade secrets or confidential information they learned about SCR-Tech's process during their employment with Envica and its predecessors.⁵² Defendants contend that the men were never employed by SCR-Tech and owe no duty of confidentiality directly to it.⁵³

{25} Evonik touted the knowledge of these former Envica employees to its customers,⁵⁴ but contends in the litigation that they offered only limited support.⁵⁵ Evonik also stated in its Responses to Plaintiff's Amended First Set of

 $^{^{48}}$ (Pl.'s Resp. Br., Ex. C: Aff. of Frank Ebinger ("Ebinger Aff.") \P 19.)

⁴⁹ (Ebinger Aff., Ex. 2 ¶ 8, Ex. 6 ¶ 8, Ex. 8 ¶ 8.)

⁵⁰ (Ebinger Aff., Ex. 4: Service Agreement between Envica Kat GmbH and Maik Blohm ¶ 8.2; Ex 12: Service Agreement between Envica Kat GmbH and Marcel Förster ¶ 8.2.)

⁵¹ (Ebinger Aff. ¶ 17, Ex. 4: Service Agreement between Envica Kat GmbH and Maik Blohm, Ex. 12: Service Agreement between Envica Kat GmbH and Marcel Förster; Lewis Aff., Attach. 3: Proposal at EES0170055.)

⁵² (Pl.'s Supplemental Br. 12.)

⁵³ (Defs.' Summ J. Br. 36 n.38; Defs.' Supplemental Br. 16 n.2.)

⁵⁴ (Lewis Aff., Attach. 1: STEAG's SCR Catalyst Regeneration Process Presentation at EES 015304 (Evonik's former name is Steag LLC).)

⁵⁵ (Pl.'s Resp. Br., Ex. F: Def. Evonik Energy Services LLC's Responses to Pl.'s Am. First Set of Interrogs. (Oct. 29, 2008) at 5–6.)

Interrogatories that Blohm and Förster "separated from Envica . . . without any non-disclosure or non-competition obligations." ⁵⁶ Gilgen later asserted that he was not aware of any employment, confidentiality, or non-disclosure agreement which would have prevented Blohm from performing services for Evonik. ⁵⁷ Hartenstein testified that he did not ask Blohm or his former employer whether Blohm was obligated not to disclose confidential information. ⁵⁸

{26} Blohm recommended Theis Hoffman to Evonik for setting up its regeneration facility and developing and implementing its regeneration process in North Carolina.⁵⁹ Gilgen hired Hoffman in March 2006 to "spearhead" the effort to create a catalyst regeneration process in North America.⁶⁰ Hoffman testified that he had researched and collected public information regarding catalyst regeneration as early as November 2005.⁶¹ Hoffman worked in Germany for eight months refining the regeneration process based on: (1) his review of the technology licensed from Integral; (2) publicly available publications; and (3) existing know-how from Evonik and its affiliates.⁶² Hoffman himself had little prior experience with American coal.⁶³

{27} Hoffman and his staff conducted extensive testing on samples in preparation for regenerating AES Somerset's catalysts.⁶⁴ In the four years Hoffman has worked at Evonik, he has developed approximately 80 recipes for the company, and no two have ever been identical.⁶⁵

⁵⁶ (*Id.*)

⁵⁷ (Gilgen Aff. ¶ 14.)

⁵⁸ (Hartenstein Dep. 79:4–17.)

⁵⁹ (*Id.* at 78:23–80:19.)

^{60 (}Gilgen Aff. ¶ 15.)

 $^{^{61}}$ (Aff. of Thies Hoffmann, Chief Chemical Engineer of Evonik Energy Services LLC ("Hoffmann Aff.") \P 8.)

^{62 (}Gilgen Aff. ¶ 15.)

^{63 (}Hartenstein Dep. 58:3-6.)

⁶⁴ (Hoffmann Aff. ¶¶ 18, 28, 31, 44–49.)

^{65 (}*Id.* ¶ 50.)

E. Evonik's AES Somerset Contract

{28} AES Somerset made its need for SCR catalyst regeneration known in early 2006, with a plan to remove its catalysts for treatment in October of that year. 66 Evonik submitted a proposal to AES Somerset for SCR management services in March 2006. Evonik's proposal included SCR catalyst inspection, catalyst testing, determining deactivation causes, and ammonia injection grid tuning, but it did not include catalyst cleaning or regeneration. 67 Some time later, Evonik submitted a bid to AES Somerset to perform SCR catalyst regeneration. In preparing its bid, Evonik utilized SCR-Tech's sampling data which had been provided to AES Somerset by SCR-Tech in connection with a prior job. Defendants state that this data was provided to them by AES Somerset. 68

{29} Evonik also had SCR-Tech's pricing information when preparing its bid for the AES Somerset work. The parties dispute how Evonik obtained the information. SCR-Tech claims that its bid was confidential and that Evonik wrongfully obtained SCR-Tech's bid before it submitted its own proposal.⁶⁹ Evonik claims that it obtained SCR-Tech's bid only after Steve Wiese, AES Somerset's former power plant specialist, joined Evonik in August 2006, and after AES Somerset had decided in late July to award the job to Evonik.⁷⁰ Evonik actually submitted its final proposal to AES Somerset on August 7, 2006.⁷¹ The contract to regenerate AES Somerset's 144 deactivated catalysts was executed by AES Somerset on September 1, 2006, and by Steag LLC (predecessor to Evonik) on September 8, 2006.⁷² The work was to be completed by May 2008 at Evonik's North Carolina facility, which was unfinished at the time of the contract.⁷³ If the facility's

^{66 (}Defs.' Supplemental Br., Ex. 7: Aff. of Steve Wiese ("Wiese Aff.") ¶ 10.)

⁶⁷ (Lewis Aff., Attach. 9: Proposal to AES Somerset Generating Station Unit 1 (Mar. 2006) at EES001824, 001837–38.)

⁶⁸ (Wiese Aff. ¶ 10.)

⁶⁹ (Pl.'s Supplemental Br. 17; see Lewis Aff., Attach. 11: Proposal to AES Somerset LLC's Somerset Station (Aug. 2006) at EES001846–47.)

⁷⁰ (Wiese Aff. ¶ 10.)

⁷¹ (See Pl.'s Supplemental Br. 17; Lewis Aff., Attach. 11: Proposal to AES Somerset LLC's Somerset Station Aug. 2006 at EES001846–47.)

 ⁽Gilgen Aff., Tab 5: Proposal to AES Somerset LLC's Somerset Station Aug. 2006 at EES000084.)
 (Id. at EES000038.)

construction were delayed, Evonik would have the catalyst regenerated in its German facility or in Integral's facility in Austria.⁷⁴ Pursuant to its licensing agreement, Evonik paid Integral a \$20,220.00 royalty fee in connection with Evonik's catalyst regeneration contract for AES Somerset.⁷⁵

{30} Hans Hartenstein assured AES Somerset on September 21, 2006, that Evonik had developed and performed regeneration for its own catalysts since 1997 with a method that predated Envica's process. ⁷⁶ He further stated that the company had retained the services of former Envica employees. ⁷⁷ Evonik's individual steps for its regeneration process had been determined by October 2006. ⁷⁸ Hoffman created Evonik's regeneration recipe for the AES Somerset contract. ⁷⁹ He indicates that some of Evonik's process differs from the process that was used by Envica in 2005 and 2006. ⁸⁰ As noted in the sealed endnotes below, there are variations between the recipes used by SCR-Tech and Evonik for AES Somerset.

{31} Evonik also used values from an SCR-Tech technical report in its communication with AES Somerset. Hans Hartenstein stated these had been provided to SCR-Tech by an AES Somerset employee.⁸¹ In an SCR Inspection and Catalyst Testing Report Evonik provided to AES Somerset, Evonik listed six SCR catalyst test results prepared by SCR-Tech and provided to AES Somerset from 2002 to 2005.⁸² Evonik also submitted other SCR-Tech reports to AES Somerset which SCR-Tech had marked confidential.⁸³ Hans Hartenstein was familiar with SCR-Tech's work with AES Somerset because he had executed the contract for that work on behalf of SCR-Tech. SCR-Tech's agreement with AES Somerset contained

74 (Id.)

⁷⁵ (Gilgen Aff. ¶ 17; Tab 6 (Invoice).)

⁷⁶ (Lewis Aff., Attach. 13: E-mail from Hans Hartenstein to Dennis Monnin, Group Leader AES Somerset (Sept. 21, 2006 08:22:02).)

^{77 (}*Id.*)

⁷⁸ (Hoffmann Aff. ¶ 34.)

⁷⁹ (*Id.* ¶¶ 42–49.)

^{80 (}*Id.* ¶ 39.)

^{81 (}Lewis Aff., Attach. 16: E-mail from Han Hartenstein to John Curtin (Feb. 22, 2007 18:23:54).)

^{82 (}Lewis Aff., Attach. 14: SCR Inspection and Catalyst Testing Report at EES001589.)

^{83 (}Pl.'s Supplemental Br. 7.)

a confidentiality provision which prohibited the disclosure of any "technical and business information, data and material regarding the Services and/or Products disclosed" by SCR-Tech in connection with the performance of its 2003 contract or "information it might learn concerning the work" performed by SCR-Tech.⁸⁴ The agreement allowed AES Somerset to provide information already in the public domain or already in its possession without a confidentiality obligation.⁸⁵

{32} Evonik also provided client reports to other potential customers that are substantially similar to or, in some aspects, identical to those used by SCR-Tech while Hans Hartenstein was its President.⁸⁶

F. Loss of Evonik Documentation

{33} Approximately eight months after this action was filed and seven months after Defendants were served with discovery, a burglary reportedly occurred at Evonik's premises, resulting in the loss of computer equipment. Among the stolen equipment was Hans Hartenstein's hard drive, which included all of his sent e-mails from 2007, at which time, Evonik was developing its regeneration process and constructing its facility.

IV. LEGAL STANDARD

{34} A party is entitled to summary judgment if the record shows that "there is no genuine issue as to any material fact and that any party is entitled to judgment as a matter of law." Because summary judgment supplants trial of the factual issues, all the evidence is viewed in the light most favorable to the nonmoving party. 88 The party seeking summary judgment bears the initial burden of demonstrating the absence of a genuine issue of material fact. 89 This burden

 $^{^{84}}$ (Lewis Aff., Attach. 19: General Terms and Conditions of Purchase Order Between SCR-Tech and The AES Corp. at 000070.)

^{85 (}*Id.*)

^{86 (}Cf. Pl.'s Resp. Br., Ex. A, Attach. 2 with Pl.'s Resp. Br., Ex. A, Attach. 3.)

⁸⁷ N.C. R. Civ. P. 56(c).

⁸⁸ Combs & Assocs. v. Kennedy, 147 N.C. App. 362, 368, 555 S.E.2d 634, 639 (2001).

⁸⁹ DeWitt v. Eveready Battery Co., 355 N.C. 672, 681, 565 S.E.2d 140, 146 (2002).

may be met by proving that an essential element of the opposing party's claim is nonexistent. 90 If the movant successfully makes such a showing, the burden then shifts to the nonmovant to establish the specific facts establishing the presence of a genuine fact dispute for trial. 91 The Court must exercise caution in granting a motion for summary judgment. 92 "Ordinarily, it is error for a court to hear and rule on a motion for summary judgment when discovery procedures, which might lead to the production of evidence relevant to the motion, are still pending and the party seeking discovery has not been dilatory in doing so."93

V. ANALYSIS

{35} The Motion arises at the intersection of patent law and trade secret law. It further requires dissecting the confidentiality provisions in the Hartenstein Settlement Agreement to determine whether some information may be protected by contract even if it does not qualify as a trade secret. Defendants assert the essential premise that every step of SCR-Tech's process has been made public and cannot, therefore, constitute either a trade secret or Confidential Information as defined by the Settlement Agreement.⁹⁴ Defendants then urge that all of SCR-Tech's claims must fail because each claim depends upon the information having not been made public.

{36} SCR-Tech contends that the issues cannot be so neatly narrowed. It contends that Defendants improperly dissect the SCR process into discrete pieces and then rely on disclosures of those detached parts in various public filings. It contends that this effort fails to recognize that SCR-Tech continues to have protectable interests in its process as a whole, as well as proprietary recipes using the process. SCR-Tech contends that the Court cannot conclude, as a matter of law, that these disparate publications would allow one to develop successfully a

⁹⁰ Id

⁹¹ Lowe v. Bradford, 305 N.C. 366, 369-70, 289 S.E.2d 363, 366 (1982).

⁹² Collingwood v. Gen. Elec. Real Estate Equities. Inc., 324 N.C. 63, 66, 376 S.E.2d 425, 427 (1989).

⁹³ Ussery v. Taylor, 156 N.C. App. 684, 686, 577 S.E.2d 159, 161 (2003) (quoting Conover v. Newton, 297 N.C. 506, 512, 256 S.E.2d 216, 220 (1979).

^{94 (}Defs.' Summ. J. Br. 8, 12.)

scr market. Scr-Tech urges that the information developed to date, based on only limited discovery, at a minimum, strongly suggests that Evonik depended upon its misappropriation and misuse of Scr-Tech's protected information. As Scr-Tech phrases it, Evonik was heavily dependent "on the base Envica method used by Scr-Tech" and that "the core of Evonik's process is the very same Envica process that Scr-Tech initially licensed and adapted for the North American market." Scr-Tech contends that inferences arise from the undisputed facts that Evonik hired the Hartensteins, who had knowledge of Scr-Tech's confidential information and trade secrets, and engaged the services of two key former Envica employees, Maik Blohm and Marcel Förster, who assisted Scr-Tech while at Envica and who were under confidentiality obligations not to reveal the Envica process to Evonik. Scr-Tech also stresses that Evonik's use of Scr-Tech data to obtain and perform the AES Somerset contract mandates allowing the case to proceed to full discovery.

{37} In the following discussion, the Court separately addresses the trade secrets claims and Plaintiff's other remaining claims. It narrows the trade secret claims and allows the other claims to proceed.

A. Trade Secret Claims

1. Legal Principles

{38} SCR-Tech's trade secret misappropriation claims arise under the North Carolina Trade Secrets Protection Act ("the Act"), which provides a cause of action for misappropriation.⁹⁷ A trade secret is misappropriated when it is acquired, disclosed, or used "without express or implied authority or consent, unless such trade secret was arrived at by independent development, reverse engineering, or was obtained from another person with a right to disclose the trade secret."⁹⁸ A "threshold question in any action involving allegations of misappropriation of trade

^{95 (}Pl.'s Supplemental Br. 10.)

^{96 (}IA)

⁹⁷ See N.C. Gen. Stat. § 66-153 (Lexis 2011); Combs, 147 N.C. App. at 368-69, 555 S.E.2d at 639.

⁹⁸ N.C. Gen. Stat. § 66-152 (1) (Lexis 2011).

secrets is whether the information in question constitutes a trade secret under the Act."99

{39} North Carolina defines a trade secret as:

[B]usiness or technical information, including but not limited to a formula, pattern, program, device, compilation of information, method, technique, or process that: a. Derives independent actual or potential commercial value from not being generally known or readily ascertainable through independent development or reverse engineering by persons who can obtain economic value from its disclosure or use; and b. [i]s the subject of efforts that are reasonable under the circumstances to maintain its secrecy.¹⁰⁰

{40} The North Carolina Court of Appeals has identified six factors for courts to consider when determining whether information is a trade secret.¹⁰¹ They are:

(1) the extent to which information is known outside the business; (2) the extent to which it is known to employees and others involved in the business; (3) the extent of measures taken to guard secrecy of the information; (4) the value of information to business and its competitors; (5) the amount of effort or money expended in developing the information; and (6) the ease or difficulty with which the information could properly be acquired or duplicated by others. ¹⁰²

Plaintiff maintains that the Court should weigh each of these six factors before summarily rejecting any of SCR-Tech's trade secret claims. Defendants contend that once it is clear that the information claimed to be a trade secret has been made publicly available, inquiry into the remaining elements is unnecessary.

 $^{^{99}}$ Edgewater Servs., Inc. v. Epic Logistics, Inc., 2009 NCBC 20 \P 23 (N.C. Super. Ct. Aug. 11, 2009). 100 N.C. Gen. Stat. § 66-152 (3) (Lexis 2011).

¹⁰¹ These factors have their origin in a comment to the trade secrets definition contained in the First Restatement of Torts. *See* 4 Restatement, Torts, § 757, comment b.

Sunbelt Rentals, Inc. v. Head & Engquist, L.L.C., 174 N.C. App. 49, 53, 620 S.E.2d 222, 226 (2005) (Factors are to be considered when determining whether an item is a trade secret.); Area Landscaping, L.L.C. v. Glaxo-Wellcome, Inc., 160 N.C. App. 520, 525, 586 S.E.2d 507, 511 (2003) ("To determine what information should be treated as a trade secret, a court should consider the following factors"); Combs, 147 N.C. App. at 369, 555 S.E.2d 640 ("[O]ur courts have fashioned six factors which are to be considered when determining whether information is a trade secret"); State ex rel. Utils. Comm'n v. MCI Telecomms. Corp., 132 N.C. App. 625, 634, 514 S.E.2d 276, 281 (1999) ("When determining whether information is a trade secret, the following factors are proper to consider. . . ."); Wilmington Star-News v. New Hanover Reg'l Med. Ctr., 125 N.C. App. 174, 180, 480 S.E.2d 53, 56 (1997), appeal dismissed, 346 N.C. 557, 488 S.E.2d 826 ("Other jurisdictions in interpreting similar trade secrets statues have determined the . . . factors should be considered.").

{41} The factors overlap. Cases decided under the Act reflect that courts do not always examine each of the factors separately and individually. One of the factors, and particularly the ease or difficulty which would accompany the use of public information might inform the accused party, lend support for an argument that publication alone of separate steps of a process does not necessarily negate a trade secret claim in the overall process. In this case, the trade secret claims depend on what has been publicly disclosed and whether the Court can conclude as a matter of law that a competitor could piece together the public disclosures into SCR-Tech's process, defeating trade secret protection.

(1) its overall process, for which it admits parts have been published, but which it avers has not been publicly disclosed in its entirety; (2) the individual steps that form that process; and (3) the "various recipes (*i.e.* chemical concentrations, preparation times, and temperatures) utilized in applying the process." ¹⁰⁴ Defendants maintain that SCR-Tech disclosed the overall general process with each of its component steps on its own website, so that information at the first level of abstraction cannot be protected; that the individual steps and sub-processes within them are each described in numerous patents (five of which belong to SCR-Tech or its sister company, CoaLogix), so that information at the second level of abstraction cannot be protected; and that the components of the individual recipes also have been disclosed, precluding a *prima facie* showing of trade secret misappropriation

¹⁰³ See, e.g., Griffith v. Glen Wood Co., 184 N.C. App. 206, 216, 646 S.E.2d 550, 558 (2007) (affirming trial court's summary judgment ruling for defendant on trade secret misappropriation claim without reference to the six factor test when evidence revealed that the secret could be obtained through reverse engineering); Cox v. Dine-A-Mate, Inc., 129 N.C. App. 773, 779, 501 S.E.2d 353, 356–57 (1998) (affirming the Rule 12(b)(6) dismissal of a trade secrets claim without reference to six factor test when the record showed that the information claimed as a trade secret is "readily ascertainable through independent development"); S.E.T.A., Univ. of N.C. – Chapel Hill, Inc. v. Huffines, 101 N.C. App. 292, 296–97, 399 S.E.2d 340, 343 (1991) (no reference to the factors when determining trade secrets did not exist); Mech. Sys. & Servs. v. Carolina Air Solutions, L.L.C., 2003 NCBC 9 ¶¶ 7–9; 34–35 (N.C. Super. Ct. Dec. 3, 2003) (determining that a trade secret did not exist without reference to the six factor test when information claimed as a trade secret had been made public).

for even the recipes. Again, SCR-Tech claims that Defendants approach of attacking individual component pieces is inappropriate.¹⁰⁵

{43} The tension presented by these two positions presents two fundamental questions: (1) whether information necessarily loses any possible trade secret protection by the mere publication of that information in any source; and (2) if publication thwarts protection for information at one level, whether the holder may still maintain a protectable interest in information at a different level of abstraction than what is published (that is, in information that is more specific than the general disclosure). There are general principles that inform the Court's approach to this tension in the specific context where the publication claimed to destroy trade secret protection derives from patents.

{44} It is axiomatic that "[m]atters of public knowledge or of general knowledge in an industry" or "information that is freely available throughout [an] industry" cannot be claimed as a trade secret. ¹⁰⁶ It is also clear that once a company makes its secret information public by its own advertising, the information loses trade secret protection. ¹⁰⁷ It is well established that information published as a patent cannot be protected as a trade secret.

A patent . . . demands the inventor disclose the best method known by which a person reasonably skilled in the art may practice the invention [I]f one maintains the only manner of practicing an invention as a trade secret, he has not made the disclosure sufficient to obtain a patent. Conversely, the owner of a valid patent will have disclosed the best method for practicing the invention, and thus no longer possess a valuable trade secret related to the practice of the invention unless he later develops some unanticipated alternative practice. 108

¹⁰⁵ (Pl.'s Supplemental Br. 19.)

¹⁰⁶ Softchoice Corp. v. MacKenzie, 636 F. Supp. 2d 927, 936–37, 939 (D. Neb. 2009) (interpreting Nebraska's implementation of the Uniform Trade Secrets Act). North Carolina adopted its version of the Uniform Trade Secrets Act in 1981. Since 1979, forty-four states and the District of Columbia have adopted the Act in some form. See Eric E. Johnson, Hamline Law Rev. Vol. 33:545, 550 (2010). Although there are differences in the Uniform Trade Secrets Act and North Carolina's Act, other courts' interpretations of the uniform act are persuasive on this Court.

¹⁰⁷ See Biocore, Inc. v. Khosrowshahi, 96 F. Supp. 2d 1221, 1227 (D. Kans. 2000) (interpreting Kansas' implementation of the Uniform Trade Secret Act) (plaintiff's publication of alleged trade secrets in promotional material vitiated its trade secret misappropriation claim).

¹⁰⁸ Glaxo, Inc. v. Novopharm Ltd., 931 F. Supp. 1280, 1298 (E.D.N.C. 1996).

Likewise, information published in patent applications lacks the secrecy required to maintain trade secret status. 109

While it is well established that patent disclosure precludes trade secret protection for the information disclosed, "[t]rade secrets can coexist with patent protection directed to the same general subject matter." For instance, it is possible for simultaneous patent and trade secret protection to subsist for "related components of an article or steps in a process" Also, post-patent refinements can qualify for trade secret protection as an exception to the general rule of patent preemption. Finally, patent disclosures in broad terms do not necessarily foreclose trade secrets in more specific undisclosed "salient features." Thus, holders of intellectual property rights may in some instances utilize both trade secrets law and patent law to protect the same body of information.

{46} Guided by the Supreme Court opinion in *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 94 S.Ct. 1879, 40 L.Ed.2d 315 (1974), the U.S. Court of Customs and Patent Appeals described the interplay between patents and trade secrets as follows:

[W]herever possible, trade secret law and patent law should be administered in such manner that the former will not deter an inventor from seeking the benefit of the latter, because the public is most benefited by the early disclosure of the invention in consideration of the patent grant. If a patent applicant is unwilling to pursue his right to a patent at the risk of certain loss of trade secret protection, the two systems will conflict, the public will be deprived of knowledge of the invention in many cases, and inventors will be reluctant to bring unsettled legal questions of significant current interest before this court for resolution. 114

 $^{^{109}\,}$ See Vital State Canada, Ltd. v. Dreampak, LLC, 303 F. Supp. 2d 516, 525 (D.N.J. 2003).

¹¹⁰ Air Prods. & Chems., Inc. v. Chas. S. Tanner Co., 219 U.S.P.Q. 223, 252 (D.S.C. 1983) (citing Colgate-Palmolive Co. v. Carter Prods., Inc., 230 F.2d 855, 865, 108 U.S.P.Q. 383, 390–91 (4th Cir. 1956), aff'd, 738 F.2d 454 (Fed. Cir. 1984).

¹¹¹ Roger M. Milgrim & Eric E. Benson, Milgrim on Trade Secrets 8.02[2] 8-6, 8-7 (2011).

¹¹² Hickory Specialties, Inc. v. Forest Flavors Int'l, Inc., 12 F. Supp. 2d 760, 769–70 (M.D. Tenn. 1998).

¹¹³ Giasson Aero. Sci. v. RCO Eng'g, Inc., 680 F. Supp. 2d 830, 841 (E.D. Mich. 2010); see also Schalk v. State, 767 S.W.2d 411, 446 (Tex. App. 1988) (the disclosure of general concepts does not nullify a trade secret claim to specific algorithms).

¹¹⁴ In re Sarkar, 575 F.2d 870, 872 (C.C.P.A. 1978).

{47} Plaintiff correctly argues that a "trade secret can exist in a combination of characteristics and components, each of which, by itself, is in the public domain, but the unified process, design, and operation of which, in unique combination, affords a competitive advantage and is a protectable secret."115 The Fourth Circuit phrased the issue in Servo Corp. of America v. General Elec. Co. as "whether, taking into account all of the . . . relevant disclosures, it is reasonable to conclude that a competitor could have ascertained the working combination from an examination of those disclosures."116 The federal district court for the Northern District of California echoed that principle in *Uniram Tech., Inc. v. Taiwan* Semiconductor Mfg. Co., stating that protection of a process comprised of published components "turns on how easy or difficult it is to assemble the relevant elements into the secret combination."117 If all the individual parts of a process are in the public domain, so that through specific disclosures the entire process can be generally known or readily ascertainable through the independent development by those who can obtain economic value through the disclosure, then that entire process will lose any trade secret protection. 118 If part of the process becomes known, but other steps remain undisclosed, then the secret steps may maintain trade secret protection. 119 These endpoints bear resemblance to certain of the six

¹¹⁵ Imperial Chem. Indus., Ltd. v. Nat'l Distillers & Chem. Corp., 342 F.2d 737,742 (2d Cir. 1965); see Biocore, Inc., 96 F. Supp. 2d at 1226 ("[K]nowledge of the best combination of processes or systems of combinations of elements may amount to a trade secret" even if the component parts of the secret have been revealed.).

¹¹⁶ 393 F.2d 551, 554 (4th Cir. 1968).

^{117 617} F. Supp. 2d 938, 943 (N.D. Cal. 2007). "As an example, if the Coca-Cola formula consists of a combination of ten nonsecret ingredients, then a document which lists those ten ingredients in the middle of a sea of other chemicals might not constitute adequate disclosure of the formula because the precise recipe would be too difficult to derive. In that instance, it may be unfair to hold accountable trade secret defendants for picking out the ten ingredients from a very long list and contending that those ten and only those ten would have some special benefit once combined. On the other hand, if the list has only eleven ingredients, and if one skilled in the relevant art or science viewing the list would likely know that the formula was a combination of ten of the ingredients, then the matter is quite different." *Id.*

See Softchoice Corp., 636 F. Supp. 2d at 936-37, 939; N.C. Gen. Stat. § 66-152(3) (Lexis 2011).
 See Coca-Cola Bottling Co. of Shreveport, Inc. v. Coca-Cola Co., 107 F.R.D. 288, 289 (D. Del. 1985). Although most of the ingredients of Coca-Cola are publicly known, the complete formula is one of the best-kept trade secrets in the world. Id. If, however, Coca-Cola's potential competitors uncovered from various public sources not just the ingredients for the beverage, but also the exact

factors identified as relevant to the North Carolina Act, and particularly the last factor, "the ease or difficulty with which information could properly be acquired or duplicated by others." ¹²⁰

- 48\text{} It is clear that this line of cases recognizes that comparing the publication of component parts of a process to a trade secret claim in the overall process involves a mixture of fact and law. Application of the legal principles is made more difficult in this particular case where some of the disclosures of individual steps upon which Defendants rely relate to applications and industrial uses that are not specifically in the context of SCR catalyst regeneration. The cases suggest that when connection between the nature and use of a patented invention and the particular enterprise from which the trade secret claim arises becomes more tenuous, a claim that trade secret protection has been lost by the public patent disclosure also becomes more tenuous, giving rise to issues of fact.
- {49} More specifically, those issues arise in this case when Defendants cite patents that disclose processes outside the field of SCR catalyst cleaning and regeneration to defeat a trade secret claim in SCR-Tech's SCR process. Yet, to defeat a trade secret claim at this stage of the proceeding, the Court needs to conclude as a matter of law that the disclosed information can be said to be generally known or readily ascertainable by competitors, so as to no longer have independent economic value. Plaintiff cannot dispute that these disclosures are in the public domain, but it takes issue with Defendants' reliance on patents outside the relevant field and the assertion without further discovery or testimony that any trade secret claim has been foreclosed as a matter of law. Plaintiff claims, for instance, that it is appropriate to dismiss a trade secret claim in the SCR process

measures of those ingredients with the proper mixing methods, times, and temperatures, so that the competitors could recreate the beverage from the discovered components, the formula itself would lose its trade secret protection. If a competitor were to discover which "natural flavors" the company adds to the recipe through legitimate outside sources, part of the process would lose trade secret protection, though the rest of the formula could remain protected. Coca-Cola prints on its label that it contains carbonated water and caramel color. Those ingredients are part of the process to make the beverage, but Coca-Cola cannot claim as a trade secret the fact that it uses those ingredients because it has disclosed them.

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¹²⁰ See, e.g., Sunbelt Rentals, Inc., 174 N.C. App. at 53, 620 S.E.2d at 226.

because of patents which teach washcoat catalyst uses in different industrial applications, because it claims that a washcoat catalyst's function is different than that of an SCR catalyst. 121 It argues that a washcoat catalyst "may be utilized . . . in automobile catalytic converters or for reducing nitrous oxide in emissions from gas-fired turbines[.]" 122 Plaintiff argues it necessarily follows that genuine issues of material fact arise when Defendants rely on publications in these unrelated fields. At this stage, without the benefit of further discovery or expert testimony, the Court cannot conclude as a matter of law that a disclosure related to automobile catalytic converters and gas-fired turbines sufficiently discloses information about SCR catalyst regeneration so that SCR-Tech's potential competitors could readily ascertain part of SCR-Tech's otherwise secret process for power plant scrubbers. In those instances where Defendants rely only on publications in such different fields of application, the Court concludes that there are material issues precluding summary judgment.

\$50} The Court is further confronted with different positions on whether the actual source of Defendants' knowledge in entering the market is material to the determination of whether any trade secret protection has been lost. SCR-Tech contends that information can be published without becoming generally known, and the Court should inquire as to what information Defendants actually used in developing their process and not be satisfied with a demonstration that Defendants could have developed the process from independently available information. SCR-Tech contends that such an approach necessarily creates material issues of fact. Plaintiff promotes the Second Circuit's holding that the "possibility that Defendants might have gained some knowledge by studying . . . publicly available material is immaterial." According to SCR-Tech, the factual record to date

¹²¹ (Tr. of Oral Argument at 63–64, 71, SCR-Tech LLC v. Evonik Energy Servs. LLC, No. 08- CVS-16632 (argued June 29, 2010)).

 $^{^{122}}$ (Defs.' Summ. J. Br., Ex. R: U.S. Patent No. 7,559,993 (issued July 14, 2009) ("SCR-Tech '993 Patent") 1:20–27.)

¹²³ (Pl.'s Resp. Br. 21.)

^{124 (}Pl.'s Supplemental Br. 23.)

¹²⁵ (Pl.'s Resp. Br. 21.)

"reduces the likelihood that any of Defendants' cited publications actually demonstrates public availability of SCR-Tech's disclosed trade secrets." Again, Defendants contend that if the information has been published, further inquiry is neither necessary nor appropriate because information that is public by definition cannot be a trade secret or confidential. 127

An unpublished decision of the North Carolina Court of Appeals implied that when information alleged to be a trade secret is clearly and easily obtained through a single publication, then the source of the actual knowledge the defendant used is not relevant. That is another way of saying that information that can easily be concluded as a matter of law to be easily accessible to a competitor cannot fall with the definition of a trade secret. But, it does not answer the inquiry when that factual inquiry has a less obvious answer. The facts in the case at bar are significantly different and significantly more complicated than the single publication before the Court of Appeals. The Court believes the issue is more akin to that faced by the Fourth Circuit in *Servo Corp. of America*, which held that the issue of whether to inquire into a defendant's actual use of plaintiff's information takes on a different dimension when the defendant claims that trade secret status

^{126 (}Pl.'s Supplemental Br. 22.)

¹²⁷ (See Defs.' Summ. J. Br. 13–16; Defs.' Reply Mem. in Supp. of Their Joint Mot. for Summ. J. on the Non-existence of Trade Secrets or Confidential Information 9–10.)

¹²⁸ See Bruning & Federle Mfg. Co. v. Mills, 2005 N.C. App. LEXIS 2111 at *2-3; 6-9 (N.C. App. Oct. 4, 2005).) In Bruning, the defendant was a former vice-president and shareholder of the plaintiff "B&F" a company in the business of designing, fabricating, installing, and selling dust removal systems for use in the woodworking and related industries. *Id.* at *2-3. After his thirtyyear association with the company, the defendant was responsible for B&F's marketing, sales, and design of its dust removal systems. Id. Over a year before he left B&F, the defendant submitted to the company designs and quotes for a project with Armstrong Wood Products ("Armstrong"). Id. at *3. When he left the plaintiff's employ, he sold his shares and began working for a competitor, "performing many of the same duties he had performed at B&F." Id. at *2-3. He also contacted Armstrong and prepared a bid for their project for his new employer. Id. at *3. B&F claimed a trade secret in the schematic drawing for Armstrong's project and that defendant misappropriated its design. Id. at *8. However, the Court noted that the "information needed to produce a similar design is readily available to the public in a 544 page publication by the American Conference of Governmental Industrial Hygienists, 'Industrial Ventilation: A Manual of Recommended Practice,' which provides data and information on the design, installation, and maintenance of industrial ventilation systems," and it determined that despite the similarity of the competitors' designs, plaintiff could not claim a trade secret under the Act. Id. at *8.

has been foreclosed by a combination of multiple publications that may be pieced together. The issue becomes even more complicated with the trade secret claim arises with a backdrop of strong evidence of a contractual confidential relationship between the parties and some evidence that the defendant actually utilized plaintiff's information. The *Servo* court found that in those circumstances, the focus is more on the affirmative defense of misappropriation rather than on whether the information can be defined as a trade secret in the first instance. The secret claim arises with a backdrop of strong evidence of a contractual confidential relationship between the parties and some evidence that the defendant actually utilized plaintiff's information.

{52} Evidence of independent development is then potentially relevant both to the statutory defense of independent development ¹³¹ and to the factor used in defining a trade secret by the ease or difficulty with which the information could properly be acquired and used. ¹³² The *Servo* court noted that "the gravamen of a trade secret case is a breach of confidence, rather than an infringement of property right; hence, reliance on innocent sources of information involving no breach of duty, is an essential element of the defense that secrets were previously disclosed." ¹³³ It held that while information that has been clearly and completely published cannot be the basis on which a confidential relationship or trade secret is based, the question of whether the disclosures were obvious and complete raised an issue of fact, thereby placing the burden on the alleged misappropriating party to prove innocent reliance on non-confidential sources. ¹³⁴

{53} The controlling question, then, is whether the publications upon which Defendants rely result in a complete and obvious disclosure of the technical information which SCR-Tech claims as a trade secret. And, again, the Court finds the answer may vary depending on whether the published information arises within the SCR technology field.

¹²⁹ 393 F.2d at 555.

¹³⁰ Id.

¹³¹ See N.C. Gen. Stat. § 66-152 (1) (Lexis 2011).

¹³² See, e.g., Sunbelt Rentals, Inc., 174 N.C. App. at 53, 620 S.E.2d at 226.

¹³³ 393 F.2d at 555.

¹³⁴ *Id.*

2. The General SCR-Tech Process

{54} The Court then turns to comparing SCR-Tech's claimed secrets to the public disclosures on which Defendants rely. As to SCR-Tech's claim that it's a general multi-step process in and of itself remains a protected trade secret, the Court notes that SCR-Tech's own internet disclosures make that process public. As such, this general description of the process does not constitute a trade secret. ¹³⁵ Defendants' Motion with respect to the general description of SCR-Tech's process is GRANTED.

3. The Individual Process Steps

{55} The more significant questions relate to the individual steps within the overall process and the specific recipes that SCR-Tech has developed using them. The Court examines whether SCR-Tech can differentiate its secrets from matters of general knowledge in the trade. ¹³⁶ In probing SCR-Tech's process to determine which specific aspects of it have been publicly disclosed, the Court finds it useful to break the process down into the component steps that have been publicly disclosed to comprise the process and to analyze first, the steps of the general process, and second, the specific recipes SCR-Tech provided as part of its trade secrets disclosure. ¹³⁷

a. Mechanical Cleaning

{56} SCR-Tech reported on its website that the accumulation of physical materials is one of the major causes of catalyst deactivation. Accordingly, it implements initial steps to remove the muck, or fly ash, before it removes catalyst poisons and regenerates the catalytic activity. Defendants have demonstrated that this process step has been made public and is not a protectable trade secret.

¹³⁵ (See Ex. G at 7-9.); Biocore, Inc., 96 F. Supp. 2d at 1227.

¹³⁶ See Trandes Corp. v. Guy F. Atkinson Co., 996 F.2d 655, 661–62 (4th Cir. 1993) (interpreting Maryland's implementation of the Uniform Trade Secret Act).

¹³⁷ The Court is mindful that its discussion of the claimed trade secrets could divulge the very thing Plaintiff is trying to protect. To mitigate this risk, the Court will divulge the parties' processes in as general terms as possible, referring to the specific components only in the sealed endnotes.

{57} In addition to the website description, this step is disclosed in SCR-Tech's sister company's patent application for iron-loaded SCR catalysts, as follows:

As a rule, catalysts that must be regenerated are heavily loaded with dust, so that a mechanical pretreatment for the removal of fly ash from the catalytic surfaces and passages by using industrial vacuum cleaners or compressed air has proven to be usually necessary. 138

\{58\} At oral argument, Plaintiff's counsel acknowledged that vacuuming is not a trade secret but claimed that the method by which SCR-Tech disassembles, repairs, and reassembles the catalyst is a claimed trade secret. \(^{139}\) In its opposition brief, Plaintiff stated that those processes require "serious technological know-how and technical competence.\(^{140}\) However, Plaintiff's trade secrets disclosure does not reference or define the specific process it uses to disassemble, repair, or reassemble catalysts. The Court further notes that a specification of the mechanical cleaning step is omitted from the specific recipes SCR-Tech has disclosed. Thus, SCR-Tech has failed to delineate with sufficient specificity and particularity what Defendants are alleged to have misappropriated.\(^{141}\) Without more showing, this general "knowhow" is akin to a "general ability to interpret data," which this Court found insufficient in its Order on Defendants' Joint Motion to Compel, dated December 30, 2009.

{59} SCR-Tech has not demonstrated a trade secret with respect to its mechanical cleaning of the catalysts. Defendants' Motion with respect to this process step is GRANTED.

¹³⁸ (Defs.' Summ. J. Br., Ex. L: U.S. Patent Application Publication No. 148,639 (published July 6, 2006) ("Mar. 2004 Coalogix Patent Application Publication") ¶ 12.)

¹³⁹ (Tr. of Oral Argument at 37:11–38:2, *SCR-Tech LLC v. Evonik Energy Servs. LLC*, No. 08- CVS-16632 (argued June 29, 2010)).

¹⁴⁰ (Pl.'s Resp. Br. 27.)

¹⁴¹ See Analog Devices, Inc. v. Michalski, 157 N.C. App. 462, 468, 579 S.E.2d 449, 453 (2003).

- b. Soaking and washing at a controlled pH, temperature, and chemical composition
- (60) After initial mechanical cleaning, SCR-Tech's process chemically treats catalysts in one of a different type of solution to remove physical pluggage and various poisons. The issue of whether this step includes protectable trade secrets divides into four areas: (1) the fact that a soak step is used; (2) the general chemical composition of the soak solution and the specific compounds used for treatment; (3) the criteria that go into a determination of which chemical to use; and (4) the exact process used in cleaning particular customers' catalysts. Defendants provide a host of patents and SCR-Tech internet publications they contend preclude SCR-Tech from claiming any trade secret related to the soaking and washing step. The Court concludes that SCR-Tech has not demonstrated a protectable trade secret in the general process step, the general composition of its soak solutions, the identity of specific compounds used in the acidic treatment, or the general criteria used to determine which treatment to use, but that there are material issues of fact as to whether the specific bicarbonate compound used, SCR-Tech's specific amounts and ratios of deactivating elements used to determine proper treatment, the duration of the acid-based soak step and the catalyst's movement within the acid-based solution, and the specific recipes used in the bicarbonate and caustic soak and washing treatments are trade secrets, and, if so, whether Defendants misappropriated them.
 - (1) The Fact that SCR-Tech Uses a Soak Step
- {61} SCR-Tech clearly has published the fact that it uses a soaking and washing process step. That, then, is not a protected trade secret. Defendants' Motion with respect to the use of a soak step is GRANTED.
 - (2) Specific Chemical Compounds for the Soak Solution
- {62} As to the general chemical soak systems and specific compounds SCR-Tech claims as secrets, Defendants provide patents listing various acids,

bicarbonates, and caustics used in catalyst regeneration. They contend such publications preclude SCR-Tech from claiming any trade secret related to these chemical compounds.

(63) Defendants cite a number of catalyst regeneration patents that teach cleaning catalysts with an acidic solution, including a 2004 patent from CoaLogix, SCR-Tech's sister company, disclosing that iron-loaded catalysts are to be placed in an acidic solution of "hydrochloric acid, phosphorus acid, nitric acid, and in particular sulfuric acid."142 Defendants cite two patents that disclose bicarbonate use, including one of SCR-Tech's own patent disclosures. ¹⁴³ A 2009 SCR-Tech patent for washcoat catalysts discloses the use of sodium bicarbonate or aluminum bicarbonate for cleaning. 144 The Abstract for a 2002 Mitsubishi patent for SCR catalyst regeneration discloses a method for regenerating catalysts using an alkaline solution, and one of the preferred embodiments is sodium bicarbonate. 145 Defendants also cite numerous patents disclosing that catalysts can be treated with a caustic solution to remove arsenic and silicates. A 1990 BASF Publication from the German Patent Office concerning SCR technology shows seventeen specific examples of the use of sodium hydroxide in catalyst regeneration, 146 and two SCR-Tech patents related to washcoat catalysts disclose the use of sodium hydroxide. 147 These disclosures preclude trade secret protection concerning those broad categories. Defendants' Motion with respect to the general use of acidic, bicarbonate, and/or caustic fluids is GRANTED.

{64} Additionally, SCR-Tech claims that even if the use of acids, bicarbonates, and caustics has been made public, the public disclosures do not reveal the specific compounds used for the acidic and bicarbonate based approaches,

 $^{^{142}}$ (Mar. 2004 Coalogix Patent Application Publication ¶¶ 13, 14; Defs.' Summ. J. Br. 20.)

¹⁴³ (Defs.' Summ. J. Br. 21.)

¹⁴⁴ (SCR-Tech '993 Patent 7:27-31.)

 $^{^{145}}$ (Defs.' Summ. J. Br., Ex. E: U.S. Patent No. 6,395,665 (issued May 28, 2002) ("Mitsubishi '665 Patent") Abstract, 2.)

¹⁴⁶ (Defs.' Summ. J. Br., Ex. F: Germany Patent Application No.: DE 3824464 A1 (disclosed Jan. 1, 1990) (certified translation.)

¹⁴⁷ (Defs.' Summ. J. Br. 22, Ex. S: U.S. Patent No. 6,929,701 (issued Aug. 16, 2005) ("SCR-Tech '701 Patent") 3:9–21; SCR-Tech '993 Patent, Abstract.)

thus raising issues of material fact of whether that information remains protected. ¹⁴⁸ Defendants contend the same publications preclude trade secret protection related to these specific compounds. While it is true that more specific secrets may maintain independent economic value despite disclosure of a more general process, ¹⁴⁹ here, the specific compound claimed by SCR-Tech for its acidic solution has been disclosed. The March 2004 Coalogix publication related to ironloaded catalysts discloses that after a catalyst is "largely freed of fly ash by a preparatory step," it is adjusted in an acidic solution containing the same chemicals SCR-Tech claims as a trade secret and consisting of the same concentration. ^{150 ii} As this information has been disclosed, Defendants' Motion with respect to the use of the acidic compound claimed by SCR-Tech is GRANTED.

465} As to bicarbonate-based soaks, Defendants rely solely upon SCR-Tech's washcoat catalyst patent to claim public disclosure of the compound used by SCR-Tech for SCR catalysts. As noted above, the Court cannot conclude as a matter of law that a potential competitor could link this disclosure with SCR-Tech's process for cleaning power plant scrubbers. Even if the Court were to consider this disclosure, it is significant that the patent calls for use of the same compound disclosed by SCR-Tech not as an initial soak step, but after ultrasonic treatment. There remains a question of fact as to whether this specific compound for this particular treatment has been disclosed. Defendants' Motion with respect to the bicarbonate-based compound is DENIED.

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 $^{^{148}}$ (Tr. of Oral Argument 44:13–45:7, $SCR\text{-}Tech\ LLC\ v.\ Evonik\ Energy\ Servs.\ LLC,$ No. 08- CVS-16632 (argued June 29, 2010)).

¹⁴⁹ See Giasson Aero. Sci. v. RCO Eng'g, Inc., 680 F. Supp. 2d 830, 841 (E.D. Mich. 2010); see also Schalk v. State, 767 S.W.2d at 446.

 $^{^{150}}$ (Mar. 2004 Coalogix Patent Application Publication ¶ 24; Defs.' Summ. J. Br. 49; Pl.'s Disclosure: 2003 AES Somerset Regen. Plan; 2004 Duke Regen. Plan; 2003 and 2004 Gorgas Bowen Regen. Plans.)

¹⁵¹ (SCR-Tech '993 Patent 7:27–32; Defs.' Summ. J. Br., Ex. B: Defs.' Trade Secrets Disclosure Chart 61–64.)

- (3) Criteria Used to Determine Appropriate Solution
- {66} SCR-Tech also claims that its criteria to determine whether to use an acidic, bicarbonate, or caustic solution type is a protectable trade secret, and that it has developed proprietary knowledge of particular catalysts' deactivation causes, which call for a particular soak solution. Defendants claim that various disclosures confirm that SCR-Tech's alleged proprietary knowledge is, instead, only general knowledge that has been made public.
- (67) Patent disclosures provided by Defendants reveal that acid-based treatments of SCR catalysts successfully remove alkalis (e.g., sodium and potassium), alkaline earth metals (e.g., calcium), and alkaline earth metal sulfates (e.g., calcium sulfate), whereas caustic-based treatments are successful at removing arsenic. 152 A 1986 Mitsubishi Patent for SCR-catalyst regeneration discloses that catalysts containing sodium, potassium, and sodium sulfate should be treated in an acidic solution. 153 A 2004 Coalogix patent also for SCR-catalyst regeneration calls for an acidic solution followed by a caustic solution to remove potassium and arsenic. 154 A 2007 Hitachi patent application for SCR-catalyst regeneration teaches that "the regeneration method of washing with an acid aqueous solution . . . is more effective when applied to a catalyst containing a deteriorating factor that is mainly alkali," and that arsenic may be dissolved in an acidic solution having a pH of 4 or less, or a caustic solution. A caustic solution is more "effective when applied to a catalyst containing . . . mainly arsenic." ¹⁵⁵ Another Hitachi patent application for SCR catalyst regeneration confirms these points. To "dissolve and remove away mainly an alkali metal, and alkaline earth metal, arsenic and sulfur" one should use an "acid aqueous solution having a pH of 4 or less, and preferable 2 or less." 156

 $^{^{152}}$ (Defs.' Summ. J. Br., Ex. O: U.S. Patent No. 4,615,991 (issued Oct. 7 1986) ("Mitsubishi '991 Patent") 1:44–2:1; Ex. Q: U.S. Patent Application Publication (filed Feb. 8, 2007) ("Feb. 2007 Hitachi Patent Application Publication") \P 8; Mitsubishi '665 Patent 1:35–47.)

¹⁵³ (Mitsubishi '991 Patent 1:44-2:1.)

 $^{^{154}}$ (Defs.' Summ. J. Br., Ex. K: U.S. Patent Application Publication No. 135,347 (filed Jun. 22, 2006) ("June 2006 Coalogix Patent Application Publication") \P 11.)

^{155 (}Feb. 2007 Hitachi Patent Application Publication ¶¶ 8, 22.)

 $^{^{156}}$ (Def.'s Summ. J. Br., Ex. Y: U.S. Patent Application Pub. 248,943 (filed Oct. 9, 2008) ("Oct. 2008 Hitachi Patent Application Publication") \P 11.)

A graphical illustration from that patent application reveals that acidic solutions are much more effective at removing potassium (an alkali metal) and calcium (an alkaline earth metal), that sulfur can be removed in a solution at nearly any pH, and that arsenic can be removed at nearly any pH, although its removal rate is greater in solutions with pHs at the extreme ends of the spectrum (either very acidic or very basic). An Engelhard patent states that silicates can be recovered from SCR catalyst surfaces by using sodium hydroxide. 158

- {68} These disclosures teach when to use each general treatment option, so that SCR-Tech cannot claim the general criteria as a trade secret. Defendants' Motion with respect to the general criteria used to determine when to use an acidic, bicarbonate, or caustic solution type is GRANTED.
- knowledge of when to use each class of chemicals and how to treat catalysts within these broad categories, based on specific amounts and ratios of deactivating elements, and it provided specific data based on its experience. These specific thresholds are not contained in the publications provided by Defendants. As such, depending on further discovery and evidence, SCR-Tech may be able to prove that it has particularized trade secrets beyond the publicly known general treatment options. Defendants' Motion with respect to this specific data is DENIED.
 - (4) SCR-Tech's process to clean particular catalysts
- {70} SCR-Tech claims that its recipes for soaking and washing particular catalysts are protectable trade secrets. SCR-Tech's recipes fall into the three categories listed above: acidic, bicarbonate, and caustic-based plans.
- {71} Defendants rely on a 2006 Coalogix patent application to demonstrate public disclosure of the acid-based regeneration plan. That publication discloses that after mechanical cleaning, the catalyst should be immersed in a "sulfuric acid

^{157 (}Oct. 2008 Hitachi Patent Application Publication, Figs. 6, 8.)

¹⁵⁸ (Def.'s Summ. J. Br., Ex. BB: U.S. Patent No. 6,162,524 (issued Dec. 19, 2000) 2:31–34.)

^{159 (}Pl.'s Disclosure 5.)

solution with a pH of 1.9 containing 5 g/l ascorbic acid and a surfactant addition of 0.05 wt.% at a temperature of 20°C." ¹⁶⁰ It should be soaked from 5 minutes to 24 hours, as a function of the degree of the contamination. ¹⁶¹ The catalyst also should be moved while in the solution with a crane. ¹⁶² This disclosure describes with specificity the composition of SCR-Tech's initial soak step, including temperature, but it does not disclose the exact duration of the soak or the type of movement within the solution with specificity. ^{vi} The composition of Plaintiff's acid-based soak step has been disclosed. Thus, Defendants' Motion with respect to that composition is GRANTED. Their Motion with respect to the duration of the soak step and the catalyst's movement within the solution is DENIED.

\$\frac{172}\$ With respect to SCR-Tech's asserted secrets for its bicarbonate-based soak step recipes, Defendants rely, in part, on an SCR patent for a washcoat catalyst \$^{163}\$ and on the same Coalogix patent application presented for an acid-based regeneration plan to disclose a recipe for SCR-Tech's bicarbonate-based regeneration plan, although the use of a bicarbonate chemical is not disclosed in the publication. \$^{164}\$ The washcoat patent discloses that the appropriate temperature range to conduct this step is between 25°C and 40°C. The Coalogix patent application discloses an appropriate temperature range between ambient and \$100^{\circ}\$C, with \$60^{\circ}\$C as preferable in order to shorten the treatment time. \$^{165}\$ These temperature disclosures overlap, but they also contradict one another. The Coalogix patent application also reveals that a surfactant (i.e. soap) should be used in the solution at 0.01 to 0.2 wt. %, that the catalysts can remain in an acidic-based solution "for a period between 5 minutes to approximately 24 hours," and that the catalyst may be moved in the solution. \$^{166}\$ The Court cannot conclude at this juncture that a competitor would look to a published acid-based regeneration plan

^{160 (}Mar. 2004 Coalogix Patent Application Publication ¶ 24.)

¹⁶¹ (*Id.* ¶ 18.)

⁽Id.)

^{163 (}Defs.' Summ. J. Br. 52; Ex. B: Defs.' Trade Secrets Disclosure Chart 61; SCR-Tech '993 Patent 7:27–31)

^{164 (}Mar. 2004 Coalogix Patent Application Publication ¶¶ 17, 29.)

¹⁶⁵ (*Id.* ¶ 18.)

^{166 (}Id.)

to discover how to regenerate an SCR catalyst using a bicarbonate-based solution. The Court has already expressed its reluctance to rely on a washcoat catalyst publication. SCR-Tech's disclosed bicarbonate soak step is more specific and, in some cases, different than Defendants' disclosures demonstrate. Thus, Defendants' Motion with respect to the parameters used in SCR-Tech's bicarbonate soak step is DENIED.

{73} Defendants cite a combination of three sources to demonstrate public disclosure of all trade secrets SCR-Tech claims related to its caustic soak step recipes. They provide a 2006 Coalogix patent application for SCR catalyst cleaning to disclose the use of sodium hydroxide and an initial soak step lasting between 0.3 hours and 15 hours. 168 They rely on the same SCR patent for a washcoat catalyst to disclose the proper concentrations of sodium hydroxide as between 0.4 to 5.0%. They rely upon the same Coalogix patent application presented for an <u>acid-based</u> regeneration plan to disclose that a surfactant (i.e. soap) should be used in the solution at 0.01 to 0.2 wt. % for SCR-Tech's caustic-based regeneration plan. 169 As noted above, that source discloses an appropriate temperature range between ambient and 100°C, with 60°C as preferable in order to shorten the treatment time. Plaintiff does not claim that the use of sodium hydroxide is a trade secret but claims that the remainder of the information contained in its caustic soak step is protectable as a trade secret. SCR-Tech's disclosed caustic soak step recipe is more specific than the Defendants' disclosures demonstrate. 170 vii SCR-Tech's concentration ranges are much tighter than the general range disclosed by Defendants, and SCR-Tech adjusts the concentration ranges for each customer. It also uses more specific times at a defined temperature. Thus, Defendants' Motion with respect to the parameters used in the caustic soak step is DENIED.

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^{167 (}See Pl.'s Disclosure, Regen. Plans.)

¹⁶⁸ (Defs.' Summ. J. Br. 50; June 2006 Coalogix Patent Application Publication ¶¶ 14, 25–30; SCR-Tech '701 Patent 3:12–13.)

^{169 (}Defs.' Summ. J. Br. 50; Mar. 2004 Coalogix Patent Application Publication ¶¶ 17, 29.)

^{170 (}See Pl.'s Disclosure, Regeneration Plans.)

- c. Ultrasonic treatment for removal of catalyst poisons at a controlled pH, temperature, and chemical composition
- {74} The publicly disclosed SCR-Tech process includes an ultrasound treatment. SCR-Tech refers to its specific process as "proprietary."¹⁷¹ The step uses high frequency ultrasonic vibration to remove contaminants still present on the catalyst after soaking. Because SCR-Tech has disclosed its general process step, it cannot be a protectable trade secret. Defendants' Motion with respect SCR-Tech's general use of an ultrasonic treatment step is GRANTED.
- {75} SCR-Tech also claims as trade secrets broad ranges of pH and temperature that include its unique recipes' specifications. 172 It claims more narrow ranges for energies and catalyst movement within the solution. 173 viii SCR-Tech's position is that each catalyst requires different treatment, and its particular set up for a particular catalyst must be contained within the disclosed ranges. At oral argument, Plaintiff's counsel stated that the "combination of pH level, energy level, and temperature . . . leaves literally thousands of possible combinations, and the key is how do you get the three of them to the point where they work." 174 Obviously, SCR-Tech cannot protect broad ranges, such as the entire pH scale or temperatures ranging from ambient to the boiling point of water. More particularity is required. The recipes accompanying SCR-Tech's disclosure reveal more specific elements, in particular, chemical compounds; pH, temperature, and energy ranges; and catalyst movement within the solution. ix
- {76} Defendants argue that SCR-Tech's specific ranges and particulars related to this step are contained fully within patent disclosures and, therefore, cannot qualify as protected trade secrets. To demonstrate chemical compounds, pH, and temperature ranges, Defendants offer three sources. First, they cite a 2006 Coalogix patent application publication, which contains two relevant examples of

¹⁷¹ (Ex. H at 9.)

¹⁷² (Pl.'s Disclosure 3.)

^{173 (}IA)

 $^{^{174}}$ (Tr. of Oral Argument 59:20–24, $SCR\mbox{-}Tech\ LLC\ v.\ Evonik\ Energy\ Servs.\ LLC,$ No. 08- CVS-16632 (argued June 29, 2010).)

the patent's embodiment. It discloses that the catalysts should be placed in the same sulfuric acid solution used in SCR-Tech's acidic soak step for twenty minutes with a pH of 1.9 (Example 3), or thirty minutes with a pH of 2.0 (Example 5), each at 60°C. ¹⁷⁵ Second, they cite a 2001 Coalogix patent for cleaning catalytic converters from coal burning power plants that teaches to conduct ultrasonic cleaning in a temperature range between 40°C and 80°C. ¹⁷⁶ Third, they cite a 2005 SCR-Tech patent for washcoat catalysts that teaches to conduct this step at a temperature range between 50°C and 60°C. ¹⁷⁷

{77} To demonstrate that the required energy and the movement within the solution are publicly disclosed, Defendants cite another 2006 Coalogix patent application for SCR catalysts. It states that ultrasonic treatment should be conducted preferably at 20–50 kHz.¹⁷⁸ Other Defendants' patents disclose energy ranges from less than 20 Hz–100 kHz.¹⁷⁹ The same 2001 Coalogix patent for cleaning catalytic converters from coal burning power plants discloses a narrow energy range, 27–40 kHz at 6 watts per liter and movement within the solution at a reciprocating stroke height of 100mm (3.9 inches).¹⁸⁰

{78} The 2006 Coalogix patent application publication reveals much of Plaintiff's ultrasonic treatment step. The publication discloses the use of sulfuric acid for ultrasonic cleaning. The Court already has determined that the use of sulfuric acid has been disclosed for the soak step, so that its use cannot constitute a trade secret for that step. It now determines that the compound's disclosure prevents it from being a trade secret in this step as well. The publication also states that the ultrasonic step should last between twenty and thirty minutes. It cites the precise temperature which SCR-Tech claims as a trade secret. Those elements of the process step cannot maintain trade secret protection. The 2001

¹⁷⁵ (Defs.' Summ. J. Br. 50; Mar. 2004 Coalogix Patent Application Publication ¶¶ 27, 29.)

¹⁷⁶ (Def.'s Summ. J. Br., Ex. J: U.S. Patent No. 6,241,826 (issued Jun. 5, 2001) ("Coalogix '826 Patent") 4:38–39.)

¹⁷⁷ (SCR-Tech '701 Patent 4: 27–28.)

^{178 (}June 2006 Coalogix Patent Application Publication ¶ 19.)

¹⁷⁹ (Defs.' Summ. J. Br. 25-26.)

¹⁸⁰ (Coalogix '826 Patent 2:32–50; 4:29–39.)

Coalogix patent discloses a reciprocating stroke movement at a value within SCR-Tech's reported range. Because it has been disclosed, a four inch oscillation within the ultrasound treatment step cannot be a trade secret. But, it may be possible for SCR-Tech to prove a trade secret for smaller or larger movements within the reported range. Based on the above disclosures, Defendants' Motion with respect to the use of sulfuric acid during the ultrasonic step, an ultrasonic bath at 60°C for twenty or thirty minutes, and an oscillating movement of approximately four inches is GRANTED.

- {79} By referencing the 2006 Coalogix patent alone, competitors would gain some knowledge of how to create this step in the process, but they could not complete SCR-Tech's process step based solely on that reference. The other publications do not reveal every parameter of this process step with precision. They do not reveal the particular compounds used in the bicarbonate and caustic treatments. Additionally, the disclosed energy ranges from the remaining references reveal many different options, a fact which makes a competitor's choosing the proper levels more challenging. Though broad ranges have been disclosed, SCR-Tech may be able to prove that it continues to derive independent economic value from its more specific claims.¹⁸¹
- {80} It is equally true that Defendants could use specific steps within the broad published ranges without having misappropriated trade secrets if, in fact, Defendants utilized this public information instead of relying on SCR-Tech's recipes. The Court cannot decide this issue at this stage as a matter of law. Defendants' Motion with respect to the remaining parameters of Plaintiff's ultrasonic step is DENIED.

d. Neutralization

{81} After ultrasonic treatment, SCR-Tech's catalysts can be subjected to an aqueous neutralization bath. Defendants cite numerous patents disclosing the use

 $^{^{181}}$ $\it Giasson\,Aero.\,Sci.,\,680$ F. Supp. 2d at 841 (E.D. Mich. 2010); see $\it Schalk\,v.\,State,\,767$ S.W.2d at 446.

of a neutralization rinse step with a slightly acidic solution. Plaintiff does not contest those disclosures, but states that the reasons for using such a step is not disclosed in those publications and is a trade secret. The Court concludes that a competitor interested in copying SCR-Tech's process could look to its website and its published patents, as well as those of other companies, and determine that it should rinse the catalyst in a slightly acidic solution after ultrasound treatment. Relying only on the information provided by Defendants, the competitor would understand that the process was intended to remove excess alkalis remaining on the catalyst. This step has been disclosed. The fact that the process also might have other benefits does not qualify this step as a trade secret. Defendants' Motion with respect to this general process step is GRANTED.

{82} Plaintiff claims as a trade secret the following parameters for its bicarbonate and caustic treatment plans that are not contained in the disclosures provided by Defendant: the specific pH used for each recipe, the duration of the rinse step, whether and how the solution may be circulated, whether and how catalysts are moved in the solution, and the temperature(s) at which this specific step is conducted. These plans contain a level of specificity not disclosed on SCR-Tech's website or in the submitted patents. Defendants have not shown that information to be publicly disclosed. It is possible that Plaintiff may prove it continues to maintain independent economic value from those elements. Thus, Defendants' Motion with respect to these parameters is DENIED.

e. Multi-step rinsing

{83} This step involves rinsing catalysts in multiple chambers to remove the chemicals used in treatment and precedes re-impregnation with active catalytic components.¹⁸⁴ This general step is disclosed in SCR-Tech's website description, so

¹⁸² (See Defs.' Summ. J. Br. 30-32.)

 $^{^{183}}$ (Tr. of Oral Argument 64:17–22, $SCR\text{-}Tech\ LLC\ v.\ Evonik\ Energy\ Servs.\ LLC,$ No. 08- CVS-16632 (argued June 29, 2010).)

^{184 (}Pl.'s Disclosure 4.)

it cannot be a trade secret. Defendants' Motion with respect to this general process step is GRANTED.

{84} SCR-Tech also made specific disclosures within the generalized trade secret claim related to the multi-step rinse step. It claims target pH values and conductivity levels as trade secrets. 185 xi It also disclosed in its recipes the amount of time and temperature required for this step and whether it moves the catalyst in the fluid.

{85} Defendants claim that SCR-Tech has no protected trade secrets related to this step because patents reveal the cascade washing step. A 2005 patent concerning a washcoat catalyst states:

In a preferred embodiment, cascade washing occurs in a unit having a plurality of chambers, for example four chambers. Water flows continuously from a first chamber, where it is introduced, through subsequent chambers individually until it exits a last chamber. . . . The conductivity of the water exiting the first chamber can be monitored, and is advantageously not greater than about 5 microsiemens (μ S) when the substrate is removed from the first chamber. 186

The same disclosure reveals that catalyst should be subjected to cascade washing at a temperature of 40°C to 60°C. ¹⁸⁷ Defendants also point to conductivity goals contained in a Shell Oil patent, which teaches the preparation and use of a silica based catalyst to prepare and purify a specific metal, and to pH values contained in a 2001 Coalogix patent, which teaches a process for regenerating catalytic converters. ¹⁸⁸ As noted above, the washcoat catalyst patent does not necessarily disclose secrets about SCR regeneration, and the Shell Oil patent occupies a completely different field than SCR catalyst regeneration. The Coalogix patent discloses a target pH range for a water rinse step that occurs before the ultrasonic cleaning step, rather than after it.

¹⁸⁵ (*Id.* at 4.)

¹⁸⁶ (SCR-Tech '701 Patent 5:16-30.)

¹⁸⁷ (*Id.* at 5:13–15.)

 $^{^{188}}$ (Defs.' Summ. J. Br., Ex. V: U.S. Patent No. 7,425,647 (issued Sept. 16, 2008) Abstract; Coalogix '826 Patent, Abstract.)

{86} Though the purpose of conducting a cascading rinse and the general function of that step is not a trade secret, Defendants' disclosures do not eliminate the possibility that the specific ranges for pH and conductivity that SCR-Tech sets as targets, the time and temperatures used, and the movement, if any, within the solution during this step may be trade secrets. Thus, Defendants' Motion with respect to these specific elements is DENIED.

f. Drying prior to re-impregnation

- {87} SCR-Tech claims that its "knowledge of how to dry an SCR catalyst and its ability to determine when the catalyst is sufficiently dry for re-impregnation is both confidential and proprietary." ¹⁸⁹ xii It disclosed drying processes in its specific recipes. ¹⁹⁰
- {88} Defendants cite Evonik's 2007 patent application to show that underdrying has been disclosed and that "it may be carried out under increased temperature or low pressure." Generally, this patent disclosure would preclude any trade secret claim for the general process. But, SCR-Tech claims that Evonik actually misappropriated SCR-Tech's trade secrets to prepare it prosecute its patent. Trade secret misappropriation may arise from publishing a competitor's trade secret. Also, the Evonik disclosure does not list the times and temperatures that are appropriate to use for initial under-drying. An SCR-Tech washcoat patent reveals various options for drying catalysts after cascade washing.
- {89} Defendants have not presented evidence that SCR-Tech's claimed temperatures and drying times have been disclosed. Defendants' Motion with respect to this drying step is DENIED.

^{189 (}Pl.'s Disclosure 4.)

^{190 (}Id. at 6, 7, Regeneration Plans.)

¹⁹¹ (Defs.' Summ. J. Br., Ex. X: U.S. Patent Application Publication, No: 161,509 (published Jul. 12, 2007) $\P\P$ 31, 68.)

¹⁹² See Underwater Storage, Inc. v. United States Rubber Co., 371 F.2d 950, 955 (D.C. Cir. 1966).

g. Replenishment and re-impregnation

- {90} The re-impregnation step reintroduces previously lost active metal atoms to the catalyst by dipping the catalysts in chemical solutions. SCR-Tech's website reveals that SCR catalysts are re-impregnated with vanadium, molybdenum, and tungsten and the use of vanadium pentoxide in the process. 193 This general use in the re-impregnation step cannot, then, constitute trade secrets. Defendants' Motion with respect to this general process step is GRANTED.
- \$\{91\}\ SCR-Tech maintains that it possesses a trade secret in the order in which the catalysts are dipped in each solution and in the timing of the drying steps, which it claims have not been disclosed.*\(^{\text{xiii}}\)\ Defendants have provided no disclosures related to re-impregnating SCR catalysts by dipping them into chemical solutions and drying them in the order disclosed by SCR-Tech. Nor have they provided disclosures of the compounds used or the times listed in SCR-Tech's regeneration plans. Because Defendants have provided no disclosure of this specific implementation of the more general process, which has been disclosed, SCR-Tech is entitled to proceed with its effort to prove misappropriation of this unpublished specific information.\(^{194}\)\ Defendants' Motion with respect to the specific elements of this process step is DENIED.

h. Final drying

- {92} SCR-Tech's website discloses that its process consists of final drying step. That fact cannot be a trade secret, so any trade secret related to this step must be contained in the specific times and temperatures connected to the process. Defendants' Motion with respect to this general process step is GRANTED.
- {93} SCR-Tech references specific drying times and temperatures for this step in the specific recipes attached to its trade secrets disclosure. 195 xiv Defendants point to numerous patents describing a final drying step and the various

¹⁹³ (Defs.' Summ. J. Br. 38.)

¹⁹⁴ Giasson Aero. Sci., 680 F. Supp. 2d at 841 (E.D. Mich. 2010); see Schalk, 767 S.W.2d at 446.

^{195 (}Pl.'s Disclosure, 6, 7, Regen. Plans.)

temperature ranges associated with that step, claiming that SCR-Tech's process falls within these disclosed ranges. ¹⁹⁶ They include in those disclosures SCR-Tech's 2005 washcoat catalyst patent, the same patent which revealed the cascade rinse step used by SCR-Tech. That patent teaches that following the cascade rinse, drying is "preferably performed in a three-stage oven maintained at a temperature of 100°C to 205°C [212°F to 400°F]." ¹⁹⁷ This disclosure lists a temperature range in a publication of a technology different than SCR catalyst regeneration.

{94} Whether a competitor would access this publication to learn to dry SCR catalysts and whether the temperature range referenced would allow a competitor to ascertain SCR-Tech's more specific process is a question of fact. Defendants' Motion with respect to the specific parameters used by SCR-Tech for this step is DENIED.

i. Final inspection and packaging

{95} SCR-Tech does not claim this step as a trade secret.

4. SCR-Tech's Specific Recipes

{96} SCR-Tech's Disclosure includes two practical applications and eight customer specific catalyst regeneration plans. SCR-Tech also provided two recipes for regenerating AES Somerset's catalysts. Defendants contend that none of these constitute trade secrets because their component parts have been disclosed in publications. These publications, however, do not reveal the entirety of SCR-Tech's individual recipes. Without exception, SCR-Tech's plans are more specific and more complete in their disclosures than what the publications reveal. Issues of fact remain as to whether a competitor could ascertain specific elements of Plaintiff's claimed secrets by reviewing Defendants' publications, particularly those that relate to unrelated processes. Defendants' Motion with respect to SCR-Tech's individual plans and recipes is DENIED.

¹⁹⁶ (Defs.' Summ J. Br. 41-42.)

¹⁹⁷ (SCR-Tech '701 Patent 5:16-30.)

5. SCR-Tech's Ability to Interpret Test Data

{97} In addition to the individual steps in its process, SCR-Tech claims its ability to analyze test data as a trade secret. ¹⁹⁸ The independent economic value is the ability "to determine the concentration and treatment temperatures based on the amount and ratio of deactivating compounds." ¹⁹⁹ More specifically, SCR-Tech claims that its ability to choose between acidic and caustic-based plans constitutes a trade secret. The ability to divide catalysts into these broad categories to generate a treatment plan has been disclosed in the publications that Defendants have presented. Thus, this ability cannot be a trade secret. Defendants' Motion with respect to this claim is GRANTED.

6. Evonik's Independent Development of AES Somerset Recipes

\$\{98\}\$ As noted in the discussion above, evidence may be relevant to determine whether information is a trade secret because of the difficulty with which the information could be properly duplicated by others and whether a defendant's independent development serves as a defense to a misappropriation claim.\(^{200}\) The Court allowed initial discovery on the issue of whether there is a trade secret in the first instance. The information discovered informs whether the information SCR-Tech claims as trade secrets could be properly defined from published information or independently developed.\(^{xv}\) The Court did not intend to foreclose further discovery or consideration of the independent efforts Evonik took to provide AES Somerset with a regeneration plan for its SCR catalysts. The Court's purpose was to allow inquiry into whether Defendants' ability to develop their process independently was sufficiently clear to determine summarily that SCR-Tech cannot sustain proof of a trade secret. While the Court has considered the evidence each

¹⁹⁸ In its trade secrets disclosure, Plaintiff admitted that "the methods for running these tests and analyses are described in the open literature and therefore not considered an SCR-tech [sic] trade secret." (Pl.'s Disclosure 5.)

¹⁹⁹ (Pl.'s Resp. Br. 36.)

²⁰⁰ See Sunbelt Rentals, Inc., 174 N.C. App. at 53, 620 S.E.2d at 226.

party has presented about Evonik's claim of independent development, the Court does not conclude that such evidence is dispositive at this stage.

B. Breach of Contract Claims

{99} The summary judgment motion on these claims rest primarily on Defendants' claim that the information on which the breach of contract claims must rest has also been published or is otherwise not confidential. In part, the Motion fails to the extent that it mirrors the trade secret claims on which the Court did not grant summary judgment. But, there are also other reasons why the breach of contract claims should not be summarily dismissed.

{100} The Court cannot determine as a matter of law that Plaintiff's claim that the Hartensteins came into possession of and then misused information that the contract defines as Confidential should be dismissed. At this stage, inferences from the evidence to date must be drawn in SCR-Tech's favor. SCR-Tech claims that the Hartensteins breached their contract with it by failing to take reasonable measures to protect the secrecy of its confidential information, failing to turn over all confidential information, and failing to maintain the confidentiality of its confidential information. Plaintiff also claims that Blohm and Förster breached their confidentiality agreements with Envica when they provided their expertise to Evonik, and that the Hartensteins at least should have known that these former Envica employees had knowledge of SCR-Tech's process that required protection.

- {101} Admittedly, Defendants argue and may ultimately prevail with proof that Evonik came into legitimate possession of the SCR-Tech technical and pricing information, as it came from either AES Somerset or from Steve Wiese. But the Court believes there are unresolved fact issues underlying Defendants' position.
- {102} The limited discovery conducted would allow inferences that the Hartensteins may have come into possession of and used information defined as Confidential under the Settlement Agreement. Again, the Court believes there are genuine issues of material fact as to whether the Hartensteins breached their agreement.

{103} Defendants' Motion on the breach of contract claims is DENIED.

C. Tortious Interference Claims

\$\text{\text{104}}\$ Defendants argue that Plaintiff's claim against Defendants Evonik Steag GmbH, Evonik Energy Services GmbH, and Evonik Energy Services LLC for tortious interference with the Confidentiality Agreement must fail as a matter of law because there is no breach of the underlying agreement. As the Court finds that material issues of fact exist as to the breach of contract claim, it cannot conclude as a matter of law that Plaintiff's tortious interference claim must fail. Defendants' Motion on the tortious interference claim is DENIED as relates to the grounds asserted. The Court does not have adequate information to determine whether a subsequent motion on different grounds, such as privilege, would be appropriate.

D. Unfair and Deceptive Trade Practices Claims

{105} Defendants argue that Plaintiff's claim for unfair and deceptive trade practices must fail because the claim is dependent upon Plaintiff's claims for trade secret misappropriation and tortious interference. As these claims survive, Defendants' Motion with respect to the unfair and deceptive trade practices claim on the basis asserted in the Motion is DENIED.

VI. CONCLUSION

{106} The Court determines that SCR-Tech cannot claim the following as trade secrets:

- 1) SCR-Tech's general process for cleaning and regenerating SCR catalysts;
 - 2) the mechanical cleaning step of SCR-Tech's process;
- 3) the fact that SCR-Tech employs a soaking and washing step in its process; the general use of acidic, bicarbonate, and/or caustic fluids in its soak solutions; the composition of and the identity of specific compounds used in the

acidic soak and washing step; and the general criteria it uses to determine which treatment type to use;

- 4) the fact that it uses an ultrasonic treatment step, the use of sulfuric acid in that step at a temperature of 60°C for twenty or thirty minutes, and an oscillating movement of approximately four inches;
- 5) the general use of a neutralization rinse step and the rationale for its use;
 - 6) the general use and purpose of a multi-step rinsing procedure;
- 7) the general use of a re-impregnation step using vanadium, molybdenum, and tungsten;
 - 8) the fact SCR-Tech employs a final drying step; and
 - 9) the ability to interpret test data.

As such, the Court GRANTS Defendants' Motion with respect to these claims.

- {107} The Court determines that with regard to the following SCR-Tech's trade secret disclosures, Defendants have not met their burden of establishing that the claims have been disclosed in a manner to make them generally known or readily ascertainable:
- 1) with respect to the soaking and washing step, the specific compound SCR-Tech uses for its bicarbonate-based soak step, the specific amounts and ratios of deactivating elements used to determine proper treatment, the duration of the acid-based soak step and the catalyst's movement within the acid-based solution, the specific recipes used in the bicarbonate and caustic-based soak and washing treatments;
- 2) SCR-Tech's specific parameters for conducting its ultrasonic treatment, other than those listed in number 4 above;
- 3) with respect to the neutralization rinse step for bicarbonate and caustic treatment plans, the specific pH used for each recipe, the duration of the rinse step, whether and how the solution may be circulated, whether and how catalysts are moved in the solution, and the temperature(s) at which this specific step is conducted;

- 4) with respect to the multi-step rinse, the specific ranges for conductivity and pH that SCR-Tech sets as targets, the time and temperatures used in this step, and the movement, if any, within the solution during this step;
- 5) SCR-Tech's initial drying step, including temperatures and drying times;
 - 6) the specific elements of SCR-Tech's re-impregnation step;
 - 7) the specific elements of SCR-Tech's final drying step; and
- 8) SCR-Tech's individual plans and recipes disclosed to the Court.

 The Court DENIES Defendants' Motion with respect to these claims and orders further discovery to determine that issue.

{108} Defendants' Motion with respect to SCR-Tech's claims for breach of contract, tortious interference, and unfair and deceptive trade practices is DENIED.

IT IS SO ORDERED, this 22nd day of July, 2011.

ENDNOTES REDACTED