

**UNPUBLISHED**

UNITED STATES COURT OF APPEALS  
FOR THE FOURTH CIRCUIT

---

**No. 07-1596**

---

DECISION INSIGHTS, INCORPORATED,

Plaintiff - Appellant,

v.

SENTIA GROUP, INCORPORATED; THOMAS H. SCOTT; MARK  
ABDOLLAHIAN; JACEK KUGLER; BRIAN EFIRD,

Defendants - Appellees.

---

Appeal from the United States District Court for the Eastern  
District of Virginia, at Alexandria. Claude M. Hilton, Senior  
District Judge. (1:06-cv-00766)

---

Argued: September 25, 2008

Decided: February 12, 2009

---

Before WILLIAMS, Chief Judge, WILKINSON, Circuit Judge, and  
Richard L. VOORHEES, United States District Judge for the  
Western District of North Carolina, sitting by designation.

---

Affirmed in part, reversed in part, and remanded by unpublished  
per curiam opinion.

---

Nicholas Hantzes, HANTZES & REITER, McLean, Virginia, for  
Appellant. Edward Francis O'Connor, O'CONNOR, CHRISTENSEN &  
MCLAUGHLIN, Irvine, California, for Appellees.

---

Unpublished opinions are not binding precedent in this circuit.

PER CURIAM:

Decision Insights, Inc. ("DII") appeals the district court's grant of summary judgment on all claims in favor of Sentia Group, Inc. ("Sentia"), Mark Abdollahian ("Abdollahian"), Brian Efird ("Efird"), Jacek Kugler ("Kugler"), and Thomas H. Scott ("Scott"). DII also appeals an adverse sanctions ruling for purported discovery violations.

The underlying civil action arises from a dispute between DII and Sentia surrounding the latter's development and use of a competing software application that implements a decision-making model using expected utility theory.<sup>1</sup> More specifically, DII alleges that Abdollahian, Efird, Kugler, and Carol Alsharabati ("Alsharabati"), who was not named as a defendant, disclosed trade secrets to Sentia in violation of Virginia's Trade Secret Misappropriations Act, Va. Code Ann. § 59.1-336. DII also asserts that Efird, Kugler, and Abdollahian breached their respective contractual and fiduciary obligations by disclosing other confidential and proprietary information protected by DII. DII alleges that Scott conspired with Sentia to induce DII's former employees to breach their agreements with DII. Because the district court did not consider DII's software compilation

---

<sup>1</sup> Expected utility theory, described below, encompasses several disciplines, including mathematics, economics, political science, and psychology.

claim as a separate and independent alleged trade secret, we affirm in part, reverse in part, and remand with instructions.

I.

A.

DII first developed software called a "Dynamic Expected Utility Model" ("EU Model") in the nineteen-eighties.<sup>2</sup> The EU Model, DII's primary asset, is an analytical tool used in preparing negotiating strategies by assessing risk, comparing the impact of differing operating positions, and detailing trade-offs among various alternatives.<sup>3</sup> DII has used the EU

---

<sup>2</sup> DII's "Dynamic Expected Utility Model" ("EU Model") is also known as DII's "Political Analysis Information System" ("PAIS") software.

<sup>3</sup> DII first defines the component issues and then implements state-of-the-art data collecting procedures (including utilization of a subject area expert), in order to identify the key data relative to each of the following:

- 1) identification of the stakeholders (i.e., groups, individuals, companies or governments) with potential interest in issue;
- 2) identify and quantify the policy positions of each stakeholder;
- 3) identify and quantify the resources that each stakeholder may employ to influence their or its preference on the issue; and
- 4) identify and quantify the actual importance each stakeholder attaches to the policy outcome, thereby deriving their salience toward the issue.

(JA at 888-89) After research and data collection, numerical values are associated with the responses to these four elements.  
(Continued)

Model in the operation of its business since its inception in 1989. DII owns the assets, copyright, and all proprietary rights to the EU Model.

Dr. Bruce Bueno de Mesquita ("Dr. Bueno de Mesquita"), a former employee of DII and leading published authority on expected utility theory generally, created the original source code for DII's software in the mid-1980s.<sup>4</sup> Gary Slack ("Slack"), a DII analyst and member of DII's Board of Directors, modified and updated DII's software in the early 1990s. Slack testified that he and Dr. Bueno de Mesquita essentially wrote DII's software program from scratch.

In 1998, DII hired Carol Alsharabati to make additional modifications to the EU Model. Alsharabati, who then lacked any formal or informal computer programming training, was provided a copy of DII's computer code and required to sign a

---

Based on this data, the EU Model computer software calculates dynamic bargaining positions with respect to stakeholder positions over bargaining rounds based on calculating and predicting changes in stakeholder positions.

<sup>4</sup> The terms "source code" or "code" refer to "a document written in computer language which contains a set of instructions designed to be used directly or indirectly in a computer to bring about a certain result." Trandes Corp. v. Guy F. Atkinson Co., 996 F.2d 655, 655 (4th Cir. 1993).

confidentiality agreement.<sup>5</sup> Alsharabati's work with DII was her first experience writing code for an EU Model. Alsharabati had a copy of the DII code on her computer but testified that she erased it after her work for DII was complete. Alsharabati concedes she gained valuable experience while working on the DII project.

During their work on behalf of DII, Abdollahian, Efird, and Kugler all worked with Alsharabati and had access to the DII source code for the EU Model and the other alleged confidential and proprietary materials DII now seeks to protect.<sup>6</sup> Both Abdollahian and Efird entered into Trade Secret Nondisclosure Agreements ("Agreements") with DII.<sup>7</sup> Efird's contract also included a restrictive covenant not to compete. Kugler executed an Agreement that was never signed by DII. Between October 2001 and December 2002, Abdollahian, Efird, and Kugler all left DII to form Sentia Group, Inc.

---

<sup>5</sup> Alsharabati, who describes herself as "self-taught" in the field of computer programming, has masters and doctorate degrees in political science.

<sup>6</sup> Abdollahian was in an exclusive consulting role with DII between 2000 and 2002. Efird was employed with DII during the same time period. Kugler was a director and major owner of stock in DII through December 2002.

<sup>7</sup> Abdollahian refused to sign a Consultant Agreement presented to him by DII in 1997.

B.

On November 5, 2002, Abdollahian, Kugler, and Scott incorporated Sentia Group, Inc. Scott was appointed Sentia's Chief Executive Officer, Abdollahian became Sentia's Chief Operating Officer, and Efird became an executive vice president. Kugler, a major shareholder, performed consultant work.

According to Scott, Sentia was initially formed with the idea that Sentia would obtain a software license from DII and the two companies would divide responsibilities based upon geographic territory. In late 2002, while acting on behalf of Sentia, Kugler attempted to negotiate a nonexclusive worldwide royalty license with DII but the parties did not reach agreement.

Rather than continue to negotiate with DII, Sentia decided to develop its own software application to perform the same essential functions and analysis as DII's software. Sentia sought legal advice and was advised in December 2002 as follows: "[W]e emphasize that preferably any individuals who had contact with or access to the code of the prior company not be involved in development of the new software program." (JA at 790) Counsel cautioned Sentia that if this were deemed unavoidable *given the requisite expertise*, the "new code [should] bear no resemblance, functionally, structurally, or otherwise, to the code of the prior company." (JA at 790) Sentia's counsel also suggested that

Sentia carefully document aspects of the development process - its intended function as well as design development and actual development.<sup>8</sup> (JA at 791)

At the suggestion of Abdollahian, Kugler, or both, and notwithstanding counsel's advice, Sentia hired Alsharabati to develop software for Sentia. Working with a group of software students with no prior experience in EU Models, Alsharabati wrote Sentia's first code in what DII describes as "record time," or approximately six weeks.<sup>9</sup>

According to DII, Sentia's software is the same as its own EU Model in terms of method. DII alleges that in running both programs, its comparisons obtain "equal results."<sup>10</sup> DII contends that achieving equal results is not possible unless all of the

---

<sup>8</sup> The same letter explained counsel's understanding that because Sentia sought to implement "vastly new and improved theoretical models, and that any theoretical models used by the prior company have largely been the subject of academic publications and are well known in the field, it appears possible to develop a new software program that has no substantial similarity to the software program used by the prior company." (JA at 790-91)

<sup>9</sup> Sentia's software was initially named the "Machiavelli" code, and later referred to as the "Senturion" application or model. Although presently in different computer languages, the first version of Sentia's code was in the same computer language as DII's code - Visual Basic.

<sup>10</sup> DII explains that when it compares the two programs, Sentia's output results are identical to DII's model "to 2 decimal places of accuracy."

parameters, variables and sequencing associated with the expected utility are equal. DII also claims that the Machiavelli code contains portions of DII's source code which are "commented out" and that this fact provides "proof positive" that Sentia used the DII code as a reference in writing the Sentia software program.<sup>11</sup>

DII asserts that Sentia is conducting business in direct competition with DII and using the EU Model in its business to DII's detriment.

C.

DII commenced its suit on June 30, 2006, and alleged causes of action for breach of contract (Count I), conspiracy to commit breach of contract (Count II), conspiracy to injure another in trade, business or profession (Count III), misappropriation of trade secrets (Count IV), breach of fiduciary duty (Count V), and conversion (Count VI).<sup>12</sup>

---

<sup>11</sup> Here, the term "comment" refers to computer language in a source code that is not part of the functional code, but functions instead as a guide to future programmers working with the source code and a mechanism for explaining changes in the development of the code.

<sup>12</sup> DII does not advance its claims for conspiracy to commit breach of contract, conspiracy to injure another in trade, business or profession, breach of fiduciary duty, or conversion on appeal and is therefore deemed to have abandoned those particular claims. Thus, only Counts I and IV remain.

The parties grappled with the framing of the legal issues before the district court. On February 13, 2007, the magistrate judge granted partial relief on a motion to compel filed by Sentia. The magistrate judge determined that DII's discovery responses were inadequate, in part, due to DII's failure to identify its trade secrets with specificity. The magistrate judge held Sentia's request for monetary sanctions in abeyance and directed DII to produce:

"[A] clear and express verified statement containing only those items which Plaintiff considers to be actual trade secrets and which Plaintiff has reasonable grounds to believe were misappropriated by Defendant. Plaintiff shall clearly differentiate between the material which is public knowledge from that material which is allegedly Plaintiff's trade secret, proprietary, or confidential material."

(JA at 281) (emphasis added).

On February 20, 2007, Sentia filed a second motion for sanctions claiming that DII's Fourth Supplemental Answer to Interrogatories was still deficient. DII's Fourth Supplemental response separately identified each of the twelve components of the code as processes implemented within the code. DII attempted to identify each individual component by including the lines of source code (i.e., mathematical equations) that corresponded to each. DII's response unequivocally identified as a trade secret its entire DII source code as a total compilation.

On February 23, 2007, the magistrate judge conducted a hearing to resolve several discovery disputes, including Sentia's motion for sanctions. Sentia argued that because DII did not allege Sentia copied its code, the only thing left was DII's claim regarding the 12 processes.<sup>13</sup> The parties engaged in a lengthy debate over whether lines of code were sufficient to identify and define the alleged proprietary process claims. Sentia argued that, as framed by DII, Sentia was unable to defend on the trade secret claims.

On March 2, 2007, DII produced to Sentia an expert report prepared by Gary Slack containing additional narrative and detailed flow charts showing the structure of the code and identifying each alleged proprietary process. The same report contained the identity and description of the alleged proprietary processes, the variables, the constants and the parameters. Slack's report also explained how the DII code operates as a whole.

On March 5, 2007, the magistrate judge directed DII to produce by March 9, 2007, "to the extent they exist, all

---

<sup>13</sup> Sentia's counsel made the following argument: "Remember their specific representation isn't that they [Appellees] copied their code, although they say the entire code is trade secret, because their own expert acknowledges we didn't copy their code, it's what lies within the code." (JA at 88, 91)

algorithms, block flow diagrams, narratives, and other documents associated with the development of the twelve sections" of software code DII asserts constitute trade secrets as well as "all other sections of software code" DII has identified as its trade secrets.<sup>14</sup> (JA at 125) (emphasis added) The magistrate judge awarded Sentia the costs and attorneys' fees associated with its original motion to compel and its initial motion for sanctions.

On March 9, 2007, DII requested clarification as to whether the magistrate judge contemplated production of existing documentation only, or whether DII was expected to reverse engineer algorithms from its current version of the source code.<sup>15</sup> DII explained in its motion that, because the EU Model was created over fifteen years ago, DII no longer had in its possession documentation associated with the development of the EU Model, including algorithms that would have been initially

---

<sup>14</sup> An algorithm is "[a] step-by-step problem-solving procedure, especially an established, recursive computational procedure for solving a problem in a finite number of steps." THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE 45 (3rd ed. 1992).

<sup>15</sup> The term "reverse engineer" means "to analyze a product to try to figure out its components, construction, and inner workings, often with the intent of creating something similar." WEBSTER'S NEW MILLENIUM DICTIONARY OF ENGLISH (Preview ed. 2008), available at <http://www.dictionary.com>.

relied upon.<sup>16</sup> DII reiterated the significant costs (as much as \$100,000) associated with reverse engineering the existing source code for the purpose of creating new algorithms. DII also submitted additional expert reports by Dr. Bueno de Mesquita and Andrew Fahey.<sup>17</sup>

On March 16, 2007, the magistrate judge issued an order clarifying his March 5, 2007 ruling. The magistrate judge explained that at the sanctions hearing held on February 23, 2007, the Court told DII that "it was not required to create any algorithms, block flow diagrams, narratives, and other documents associated with the development of its software or engage in reverse engineering, but that [DII] should search and produce any such responsive documents which already exist." (JA at 144) The order then stated that in light of DII's representation that no such responses exist, "this discovery matter is closed." (JA

---

<sup>16</sup> DII explained that its failure to retain such records is not suspect. According to DII, unavailability can be attributed to the fact that once a software code is debugged and made operational, the original algorithms are of little value. Similarly, as the software code is improved upon, the original algorithms are seldom updated or referenced.

<sup>17</sup> The Bueno de Mesquita report addressed Sentia's claim that certain DII processes were in the public domain and could not be considered trade secrets. The Fahey report sought to identify the alleged proprietary portions of the DII code also found within the Sentia code.

at 144-45) Sanctions were imposed against DII for a total of \$13,256.25.<sup>18</sup>

DII objected to the magistrate judge's ruling. On March 30, 2007, the district court summarily affirmed the magistrate judge's March 5, 2007 Order, finding that the imposition of sanctions was not "clearly erroneous or contrary to law." (JA at 224-25)

D.

Sentia moved for summary judgment on all of DII's causes of action. The district court heard oral argument and opined on June 5, 2007, that summary judgment was proper on all of DII's claims. Regarding Claims III through VI, the district court found that DII failed to meet its burden as to the existence of a trade secret. The district court likewise based his ruling on Counts I and II, the non-trade secret claims, on DII's failure to identify "any confidential or proprietary information obtained by [Appellees] while employed at DII that were thereafter misappropriated." (JA at 271) The district court also ruled that DII did not have an enforceable contract to assert against Kugler.

---

<sup>18</sup> After briefing, the magistrate judge held that DII was subject to sanctions in the amount of \$13,256.25. The award to Sentia was based upon costs in the amount of \$2,956.25 and \$10,300 in attorneys' fees.

DII's appeal is timely and we have jurisdiction pursuant to 28 U.S.C. § 1291.

II.

On appeal, DII contends the trial court erred by finding, as a matter of law, that DII failed adequately to identify any trade secrets relating to its software. DII also challenges the trial court's rulings on its contractual claims as well as the imposition of monetary sanctions for the alleged failure to comply with its discovery obligations.

III.

This court reviews the district court's decision granting summary judgment *de novo*. See Cont'l Airlines, Inc. v. United Airlines, Inc., 277 F.3d 499, 508 (4th Cir. 2002).

Under Rule 56(c) of the Federal Rules of Civil Procedure, summary judgment may be granted where "the pleadings, depositions, answers to interrogatories, and admissions on file, together with affidavits, if any, show that there is no genuine issue of material fact and that the moving party is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(c); Anderson v. Liberty Lobby, 477 U.S. 242 (1986); Celotex Corp. v. Catrett, 477 U.S. 317 (1986). A genuine issue exists only if "the evidence

is such that a reasonable jury could return a verdict for the non-moving party.” Anderson, 477 U.S. at 248.

Under Rule 56(e), “an adverse party may not rest upon the mere allegations or denials of his pleading, but his response, by affidavits or as otherwise provided in this rule, must set forth specific facts showing that there is a genuine issue for trial. . . .” Fed. R. Civ. P. 56(e). Thus, in order to survive summary judgment, DII is required to produce evidence setting forth specific facts that demonstrate the existence of a genuine issue for trial. In conducting its analysis, the court must view the evidence in the light most favorable to the non-moving party. See Celotex Corp., 477 U.S. at 325.

A. Trade Secret Claims - Va. Code Ann. § 59.1-336

The success of DII’s appeal largely depends upon whether DII presented sufficient evidence at summary judgment in support of its contention that its software may be deemed a trade secret.

Virginia’s version of the Uniform Trade Secrets Act defines a “trade secret” as “information, including but not limited to a formula, pattern, compilation, program, device, method, technique, or process, that:

1. Derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use, and

2. Is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.

Va. Code. § 59.1-336 (emphasis added).<sup>19</sup>

"The crucial characteristic of a trade secret is secrecy rather than novelty." Dionne v. Southeast Foam Converting & Packaging, Inc., 397 S.E.2d 110, 113 (Va. 1990); Avtec Syss., Inc. v. Peiffer, 21 F.3d 568, 575 (4th Cir. 1994) (same). "The secrecy need not be absolute; the owner of a trade secret may, without losing protection, disclose to a licensee, an employee, or a stranger, if the disclosure is made in confidence, express or implied." Dionne, 397 S.E.2d at 113 (citing Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 475 (1974)); Trandes Corp. v. Guy F. Atkinson Co., 996 F.2d 655, 664 (4th Cir. 1993). "Although the subject of a trade secret may be novel in the sense that it is something generally unknown in the trade or business, "[n]ovelty, in the patent law sense, is not required for a trade secret." Id. (citing Kewanee Oil Co., 416 U.S. at 476.)

Whether or not a trade secret exists is a "fact-intensive question to be resolved at trial." Hoechst Diafoil Co. v. Nan Ya Plastics Corp., 174 F.3d 411, 419 (4th Cir. 1999); Trandes, 996 F.2d at 661; Microstrategy, Inc. v. Li, 601 S.E.2d 580, 589

---

<sup>19</sup> Virginia's Trade Secrets Act is modeled after the Uniform Trade Secrets Act. See Dionne, 397 S.E.2d at 114; Avtec Syss., 21 F.3d at 574 (Virginia's statute "closely tracks the Uniform Trade Secrets Act.")

(Va. 2004) (“[T]he determination whether a trade secret exists ordinarily presents a question of fact to be determined by the fact finder from the greater weight of the evidence.”)

DII’s first trade secret claim is founded upon its software as a total compilation. In addition, DII contends that twelve specific functions within the DII Code amount to one or more protected trade secrets. DII suggests that the proper analysis is to evaluate each identified trade secret claim independently as in Trandes. See e.g., Trandes, 996 F.2d 655 (4th Cir. 1993) (applying identical Maryland’s Uniform Trade Secrets Act in post-trial context). We agree. Because the district court did not consider whether DII’s entire software compilation might qualify as a “trade secret” under the Virginia statute, we remand to the district court with guidance as follows:

1. Software Compilation Claim

The district court found that, “Plaintiff [DII] could not provide adequate identification of its trade secrets and confidential information, making it almost impossible for this Court and Defendants [Sentia] to ascertain what aspects of the EU Model are trade secrets, and which portions of the code are publicly available.” (JA at 270) The district court did not address whether or not the software program, as a total compilation, could qualify as a trade secret.

Understandably, identification of DII's alleged trade secrets presented difficulty for the court. As noted, supra, the parties argued over DII's actual legal theory. Sentia insisted that because DII did not assert a copyright claim, the application itself was not at issue. Sentia dedicated little time to DII's software compilation claim. Sentia's expert devoted only one paragraph within his original expert declaration to this aspect of DII's trade secret claim. Before DII produced the flowchart and block diagram of its source code, Dr. Alexander stated:

"I am unable to respond to the first identification relating to the entire code to the engine of DII's software as a compilation." In the source code provided I can see numerous standard Basic language extensions to Basic that Microsoft itself would most likely consider proprietary. DII proprietary contributions, if any, are not apparent from the entirety of the code module."

(JA at 200) Similarly, Dr. Alexander's rebuttal report focused almost entirely on DII's twelve process claims. Citing no legal authority, Sentia then faulted DII for its failure to produce algorithms corresponding to its source code.

Our opinion in Trandes is instructive regarding DII's burden. Trandes involved a computer program that performed survey calculations for the construction of subway tunnels. See Trandes, 996 F.2d at 657. In addition to an independent software compilation claim, the Trandes plaintiff alleged that both the

"specific engineering formulas and methods of calculation embodied in the Tunnel System" and "the structure and organization of the Tunnel system modules" constituted additional trade secrets. Trandes, 996 F.2d at 661, 662 n.7. These two claims were dismissed, however, because Trandes did not provide "any information whatsoever about the formulas" and likewise failed to explain "how the program was structured [or] how the program was organized." Trandes, 996 F.2d at 661-662 (plaintiff is required "to describe the subject matter of its alleged trade secrets in sufficient detail to establish each element of a trade secret"). Although the Trandes plaintiff was ultimately unsuccessful on two of its trade secret claims, we determined that Trandes presented sufficient evidence that the software itself, which was identified by source code and produced at trial, constituted a trade secret. Trandes, 996 F.2d at 662-663. Accordingly, we upheld the jury's verdict that the software compilation was a protected trade secret. Id. Thus, Trandes teaches that a plaintiff's alleged software compilation trade secret is to be analyzed separate and apart from other software trade secret claims, and that production of source code is an acceptable method of identifying an alleged compilation trade secret. Trandes, 996 F.2d at 661-63.

With respect to algorithms, DII represents that because its code was created over fifteen years ago, it had none to produce.

However, in addition to producing a complete copy of its source code, DII also presented detailed block diagram flow charts as well as expert testimony in support of its position that its source code is unique. Sentia's own expert recognized that a flow chart is an acceptable and "equally precise" alternative to the production of algorithms for purposes of identification of alleged proprietary software. (JA at 197-98)

DII produced its entire source code, as well as a flow chart and narrative explaining its software program as a whole. Accordingly, we remand DII's software compilation claim to the district court for independent consideration. On remand, should the district court determine that DII adequately identified its software compilation claim, the district court should then consider the sufficiency of DII's showing as to the existence of a trade secret and thence a triable issue of fact. In doing so, the district court should specifically address the relevant criteria for establishing the existence of a trade secret under Va. Code. § 59.1-336, namely, whether or not the compilation has independent economic value, is generally known or readily ascertainable by proper means, and is subject to reasonable efforts to main secrecy.<sup>20</sup> If, in light of these statutory

---

<sup>20</sup> On the question of whether or not DII's software compilation is generally known or readily ascertainable by proper means, we refer the district court to our opinion in (Continued)

criteria, the district court finds that a triable issue is presented, it should next consider whether sufficient evidence of misappropriation exists to survive summary judgment.

## 2. Twelve Process Claims

DII also alleges that each of twelve individual portions of the program within its source code (i.e., the twelve process claims) constitute a trade secret. The parties' experts disagree regarding the adequacy of identification and proprietary status.

DII attempts to identify each of the twelve individual components by including the lines of source code that apply or correspond to each. DII's expert explains that the twelve alleged trade secret functions "are not located in a single location in the Code, and therefore cannot easily be isolated independent of the other code as currently written . . . ." (JA at 188) DII also contends that "the annotation of the Code which identifies the location of each of the functions eliminates this impediment to identifying their functions within the Code." (JA at 188) DII does not describe what the lines of code teach, or how they translate to a protectable trade secret.

---

Servo Corp. of Am. v. Con. Elec. Co., 393 F.2d 551, 554 (4th Cir. 1968) (recognizing that plaintiff's trade secret "might consist of several discrete elements, any one of which could have been discovered by study of material available to the public . . . .")

Sentia's expert persuasively describes the difficulty in analyzing the twelve processes independently. According to Dr. Alexander, if each individual process is considered independently, the information provided by DII is incomplete and fragmented. We agree that the information on the twelve process claims is presented by DII in such a way as to prohibit meaningful analysis by Sentia, the court, or a jury. For this reason, we find that DII has not met its evidentiary burden with respect to the twelve process claims and we affirm the district court's grant of summary judgment on this issue.

### 3. Other Proprietary Claims

DII's other claims seek protection of DII reports containing marketing and research material, specific information identified in DII's user manual, and specific client contact information. The district court determined that Counts III through VI "presuppose the existence of confidential information and trade secrets" and that DII's "failure to identify [any such information] with reasonable particularity" required dismissal. (JA at 270) As a result, these specific categories of alleged proprietary materials were not discussed by the district court at all. Depending on the circumstances, any of this information could be characterized as trade secrets. (See Section "III, A.") On remand, the district court will have an opportunity to

consider DII's other proprietary claims under the statutory criteria consistent with this court's opinion.

## B. Contractual Claims

### 1. Trade Secret Nondisclosure Agreements

Abdollahian entered into an Agreement on December 12, 1994, agreeing not to disclose DII's proprietary information. Efird signed a similar Agreement on April 3, 1998. The Agreements entered into by DII's former employees contain nearly identical language and call for the application of Virginia state law. The Agreements include provisions for assignment of work product to DII and the return of confidential material upon agreement termination. The confidentiality clauses, entitled "Covenant To Retain Confidence," read as follows:

The Consultant / Representative<sup>21</sup> acknowledges that he will, as a result of an association with Decision Insights, Inc., have access to and be in a position to receive information of a confidential or proprietary nature including trade secrets. The Consultant / Representative agrees that he will not, during the association with Decision Insights or thereafter, disclose to anyone whomsoever or use in any manner whatsoever any confidential or proprietary information, whether patentable or unpatentable, concerning any inventions, discoveries, improvements, processes, methods, trade secrets, research or secret data (including but not limited to, models, formulas, computer programs and software developments), or other confidential matters possessed, owned, or used by

---

<sup>21</sup> In their respective Agreements, Abdollahian is identified as a "Consultant" and Efird is identified as a "Representative."

Decision Insights that may be obtained or learned by the Consultant / Representative in the course of, or as a result of his association with Decision Insights, except as such disclosure or use may be required in the normal course of doing business with Decision Insights and pursuant to Decision Insights Inc.[\'s] prior written consent.

(JA at 386-387) The Agreements provide that the agreement shall continue to bind the parties after their association ends. (JA at 387)

With respect to Abdollahian and Efird, the district court did not discuss enforceability of the respective confidentiality provisions. Rather, the district court relied upon an asserted lack of evidence of a breach and simply stated that DII "failed to come forward with any evidence identifying any confidential or proprietary information obtained by Defendants while employed at DII that were[sic] thereafter misappropriated." (JA at 271)

Because this court has determined that remand is proper with respect to DII\'s claim that its software as a compilation may constitute a trade secret, remand is also proper on the contractual claims in order for the district court to address DII\'s contractual claims in light of its findings with respect to the existence of a trade secret.

Kugler was presented with a similar Trade Secret Nondisclosure Agreement but DII never executed it. DII contends that the parties\' agreement is reflected within a document signed by Kugler on January 30, 1998. (JA at 860-62) Per

handwritten additions to the typed text (initialed "JK"), the Agreement carves out an exception for academic use of Kugler's work product. (JA at 861) DII posits that Kugler intended to be bound to the terms set forth in the January 30, 1998 document, particularly confidentiality and nondisclosure, notwithstanding the fact that DII never executed the written contract.

DII relies upon the Virginia State Supreme Court's opinion in Manss-Owens, which held that "the mere fact that a written contract was contemplated does not necessarily show that no binding agreement had been entered into." Manss-Owens Co. v. H.S. Owens Son, 105 S.E. 543, 547 (Va. 1921). The rationale for the rule is explained as follows:

The whole question is one of intention. If the parties are fully agreed, there is a binding contract, notwithstanding the fact that a formal contract is to be prepared and signed; but the parties must be fully agreed and must intend the agreement to be binding. If though fully agreed on the terms of their contract, they do not intend to be bound until a formal contract is prepared, there is no contract, and the circumstances that the parties do intend a formal contract to be drawn up is strong evidence that they did not intend the previous negotiations to amount to an agreement.

If it appears from the evidence that the minds of the parties have met; that, on the one side, there was a proposition for a contract, which proposition has been accepted by the other party; that the terms were in all respects agreed upon; and that a part of the mutual understanding was that a written contract embodying those terms should thereafter be executed by the respective parties - there results an obligatory contract which neither party is at liberty to repudiate.

Manss-Owens Co., 105 S.E. at 547 (quoting Boisseau v. Fuller, 30 S.E.457 (Va. 1898)); see also Charbonnages de France v. Smith, 597 F.2d 406, 414-16 (4th Cir.1979) (explaining that questions of mutual assent and the parties' intentions are "quintessentially disputes about 'states of mind'" and that "subjective states and objective manifestations of intention present interpretive issues traditionally understood to be for the trier of fact.")

DII claims a genuine issue of material fact exists with respect to whether Kugler intended to be bound in light of Kugler's deposition testimony that he had an agreement with DII that he could use DII's technology for academic purposes. (JA at 1376-77) According to DII, it would never have shared its proprietary information with Kugler had he not intimated agreement not to disclose its trade secret and confidential information. In fact, after their disassociation, on January 22, 2003, Kugler wrote to DII to assure the company that he had no intention of disclosing or making improper use of any confidential DII information. In the same letter, Kugler refers to the modifications he made to the January 30, 1998 document and states, "it is unclear to me if the agreement was consummated or to what extent the terms of such an agreement are even enforceable." (JA at 864, 1378) For these reasons, we also

remand as to this issue. Should the district court determine on remand that DII in fact possessed trade secret, confidential, or proprietary information, the district court should likewise consider whether an implied agreement existed between DII and Kugler as suggested by DII that prohibited Kugler from disclosing this information.<sup>22</sup>

## 2. Non-Competition Clause

Efird's Agreement contained a non-competition clause or restrictive covenant. Paragraph 4 of the Agreement reads in pertinent part:

[D]uring the term of this agreement and for a period of two years after termination of association, the representative shall not, for any reason, directly or indirectly, enter into or engage in any business competition with the precise business as it now exists [or] may exist at any time during the period of the representative's engagement . . . .

(JA at 387) The restrictive covenant seeks to prohibit Efird from directly or indirectly engaging in any "business competition" with DII's "precise business as it now exists [or]

---

<sup>22</sup> Sentia's brief is of little help. Sentia fails to cite to the record, or any case law, in support of its argument that the district court correctly found, as a matter of law, that no contract existed. In addition, Sentia confuses Abdollahian and Kugler in its terse discussion of the contractual claims. (Sentia claims that the Abdollahian contract was never signed by DII. That is incorrect. Rather, the Kugler agreement is the one DII never executed.)

may exist at any time during the period of [Efird's] engagement" with DII.

Under Virginia law, the following criteria determine the validity of non-competition agreements:

(1) Is the restraint, from the standpoint of the employer, reasonable in the sense that it is no greater than is necessary to protect the employer in some legitimate business interest?

(2) From the standpoint of the employee, is the restraint reasonable in the sense that it is not unduly harsh and oppressive in curtailing his legitimate efforts to earn a livelihood?

(3) Is the restraint reasonable from the standpoint of a sound public policy?

Non-competition covenants which pass these tests in the light of the facts of each case will be enforced in equity.

Blue Ridge Anesthesia & Critical Care, Inc. v. Gidick, 389 S.E.2d 467, 470 (Va. 1990) (quoting Roanoke Eng'g Sales v. Rosenbaum, 290 S.E.2d 882, 884 (Va. 1982)). In other words, the Court must determine whether the non-competition clause or restraint is greater than necessary to protect DII's interest or unreasonable in limiting Efird's ability to obtain other suitable employment. See Blue Ridge Anesthesia & Critical Care, Inc., 389 S.E.2d at 470.

Virginia law does not generally favor restrictive covenants because such covenants are a restraint on trade. See Grant v. Carotek, 737 F.2d 410, 411-412 (4th Cir. 1984). For this reason, restrictive covenants are strictly construed against the

employer. Grant, 737 F.2d at 412; accord Roanoke Eng'g Sales Co., 290 S.E.2d 882 (Va. 1982) (other citations omitted). Moreover, the employer bears the burden of proving that the restraint is reasonable under the circumstances of the case. Id. (citing, inter alia, Richardson v. Paxton Co., 127 S.E.2d 113 (Va. 1962)).

In this case, Sentia attacks this provision of Efird's contract as ambiguous and overbroad. Sentia's chief criticism of the non-competition agreement is that the contract is vague regarding the business of the company. Indeed, the district court found the non-compete unenforceable on this basis.<sup>23</sup> Construing the non-compete clause against the employer, the district court determined that the clause was "broader than necessary" to protect DII's legitimate business interests and "unduly restrictive of Efird's efforts to pursue his livelihood." (JA at 273)

In evaluating the reasonableness of the restraint from the employer's perspective, the first inquiry necessarily requires the court to consider the nature of the legitimate business

---

<sup>23</sup> Based on the purported lack of evidence establishing that DII's business was conducted worldwide, the district court also found the absence of a geographic limitation unreasonable. The district court likewise found the two-year time limitation unreasonable. Given our analysis, we need not discuss these issues.

interest at stake, namely, whether DII possessed trade secrets or other confidential and proprietary information. See Meissel v. Finley, 95 S.E.2d 186, 191 (Va. Ct. App. 1956) (“The possession of trade secrets and confidential information is an important consideration in testing the reasonableness of a restriction on competition.”)(citing Stoneman v. Wilson, 192 S.E. 816, 819 (Va. 1937)); But see Paramount Termite Control Co., Inc. v. Rector, 380 S.E.2d 922, 925 (Va. 1989) (“Although often used as a justification for non-competition agreements, it is not necessary that the employees actually had acquired or possessed specific information that could be legally defined as confidential or a trade secret, . . . .”)(internal quotations omitted). Here, the district court determined, in effect, that DII did not have any legitimate business interests worthy of protection. As a result, the district court’s analysis of the restrictive covenant was likely skewed by its conclusion that DII failed to demonstrate the existence of a trade secret.

Each of Virginia’s tests for validity of a non-competition clause prompts a reasonableness inquiry in which the analysis would necessarily include consideration of the existence of a trade secret to be protected. More importantly, the competing interests of the employer and employee must be balanced by the court and then squared with public policy. As explained by the Supreme Court of Virginia, “[t]hese standards have been

developed over the years to strike a balance between an employee's right to secure gainful employment and the employer's legitimate interest in protection from competition by a former employee based on the employee's ability to use information or other elements associated with the employee's former employment." Omniplex World Servs. Corp. v. U.S. Investigations Servs., Inc., 618 S.E.2d 340, 342 (Va. 2005) (citing Worrie v. Boze, 62 S.E.2d 876, 882 (1951)). For these reasons, we conclude that remand is also proper on this issue so that the requisite balancing and analysis may be conducted by the trial court.

#### IV.

DII's final argument on appeal is its challenge of the district court's March 5, 2007 Order imposing monetary sanctions for alleged failure to comply with discovery obligations. The district court's decision to affirm the magistrate judge's sanctions order is reviewed for an abuse of discretion. See Nat'l Hockey League v. Metro. Hockey Club, Inc., 427 U.S. 639, 642 (1976).

The sanctions order was driven by the district court's concern that DII, for strategic reasons, refused adequately to identify its purported trade secrets. However, the record tends to show that both the magistrate judge and district court were

hampered by less than thorough showings by the parties and did not come to understand fully the contours of DII's compilation argument.

Rule 37 of the Federal Rules of Civil Procedure governs imposition of sanctions for discovery violations.<sup>24</sup> Rule 37(a)(5)(A)(ii) provides that a district court "must not" order sanctions if the opposing party's nondisclosure was "substantially justified." A legal position is "substantially justified" if there is a "genuine dispute" as to proper resolution or if "a reasonable person could think it correct, that is, if it has a reasonable basis in law and fact." See Pierce v. Underwood, 487 U.S. 552, 565-66 n.2 (1988).

As noted, the alleged factual basis for the imposition of sanctions was that DII repeatedly responded inadequately to the discovery requests of Sentia, namely, identification of what it contended constituted trade secret material. To the extent DII was deemed to have failed in its efforts adequately to identify the twelve processes it contended were trade secrets, we agree with the district court. (Section "III, A, 2," supra) However, the parties also legitimately disagreed about what was required by DII in terms of identification.

---

<sup>24</sup> The magistrate judge did not explain what provision of Rule 37 he was applying.

As for the software compilation, DII argues first that the magistrate judge did not expressly direct DII to produce existing algorithms or other developmental documents prior to March 5, 2007. In fact, DII contends that the first time algorithms were even requested by Sentia was during the February 23, 2007 hearing on Sentia's motion for sanctions. The record confirms DII's representation. (JA at 90-91, 95) Sentia originally requested, and the magistrate judge first ordered, a narrative description of the alleged trade secrets. In producing the Slack report, DII complied with the February 17, 2007 Order.

Here, the parties had a "genuine dispute" as to the method of identifying the alleged trade secrets. Algorithms were not designated by Sentia or the court as the preferred method of identification prior to February 23, 2007. In addition, DII had reasonable cause to believe its production was sufficient in light of our holding in Trandes. See Maddow v. Proctor & Gamble Co., Inc., 107 F.3d 846, 853 (11th Cir. 1997) (reliance on case law is a relevant consideration in determining whether or not a party's actions during a discovery dispute are justified). Accordingly, we find that DII's failure to produce algorithms was "substantially justified." For these reasons, the imposition of sanctions was not appropriate. On remand, the district court is instructed to vacate this portion of its

earlier order and otherwise proceed in accordance with the guidance herein provided.

AFFIRMED IN PART,  
REVERSED IN PART,  
AND REMANDED