IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF UTAH

APPLIED PREDICTIVE TECHNOLOGIES, INC., Plaintiff, v. MARKETDIAL, INC. *et al.*, Defendants.	**MEMORANDUM DECISION AND ORDER GRANTING IN PART AND DENYING IN PART DEFENDANTS' MOTION TO DISMISS** Case No. 2:19-cv-00496-JNP-CMR District Judge Jill N. Parrish

This matter is before the court on a Motion to Dismiss filed by Defendants MarketDial, Inc. ("MarketDial") and John M. Stoddard ("Mr. Stoddard") on September 10, 2019. ECF No. 104. The motion is hereby GRANTED IN PART and DENIED IN PART.

BACKGROUND[1]

This suit arises out of the alleged patent infringement, trade secret misappropriation, and unfair competition of Defendants MarketDial and Mr. Stoddard. In 2015, Mr. Stoddard founded MarketDial. He now serves as an officer and director of the company.

Between August of 2013 and April of 2016, prior to founding MarketDial, Mr. Stoddard was employed at McKinsey & Company, Inc. ("McKinsey"). In November of 2013, Plaintiff Applied Predictive Technologies, Inc. ("APT") entered a confidentiality agreement with McKinsey under which APT agreed to provide McKinsey with access to confidential information in connection with McKinsey's client development and client services. Under the confidentiality

[1] At the motion to dismiss stage, the court accepts as true the factual allegations made in the complaint. *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009). Thus, the court relies upon the Complaint in summarizing the background of this dispute.

agreement, McKinsey agreed that it and its employees would use APT's confidential information only for the purposes provided in the agreement, that the information would be kept confidential, and that the information would not be disclosed to anyone other than McKinsey employees with a need to know who were bound by the agreement. Mr. Stoddard was aware of and agreed to be bound by the terms of the agreement.

Under the agreement, Mr. Stoddard received APT's confidential and trade secret information. At that same time, APT alleges, Mr. Stoddard co-founded a competitor of APT, MarketDial. While still employed at McKinsey, Mr. Stoddard continued to request and receive APT's trade secret information.

APT alleges that, because of Mr. Stoddard's surreptitious collection of information in violation of the confidentiality agreement, MarketDial has incorporated key features of the functionality of APT's products and services into MarketDial's products and services. APT further alleges that MarketDial has infringed and continues to infringe one or more of the claims of APT's patent, U.S. Patent No. 8,571,916 (the "'916 patent").

APT now brings suit, alleging four causes of action. APT brings its first and second causes of action for trade secret misappropriation under federal and Utah state law, respectively. APT brings its third cause of action for patent infringement under federal law. APT's fourth cause of action is for unfair competition under Utah state law. MarketDial and Mr. Stoddard now move to dismiss all four of APT's causes of action.

The court first addresses the patent infringement claim, then the trade secret misappropriation claims, and finally the unfair competition claim. For brevity, the court will refer to the defendants collectively as "MarketDial."

LEGAL STANDARD

"To survive a motion to dismiss, a complaint must contain sufficient factual matter, accepted as true, to 'state a claim to relief that is plausible on its face.'" *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (quoting *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007)). "The burden is on the plaintiff to frame a complaint with enough factual matter (taken as true) to suggest that he or she is entitled to relief." *Robbins v. Oklahoma ex rel. Dep't of Human Servs.*, 519 F.3d 1242, 1247 (10th Cir. 2008) (citation omitted). "Threadbare recitals of the elements of a cause of action, supported by mere conclusory statements, do not suffice." *Iqbal*, 556 U.S. at 678. "[O]nce a claim has been stated adequately, it may be supported by showing any set of facts consistent with the allegations in the complaint." *Twombly*, 550 U.S. at 563.

PATENT INFRINGEMENT CLAIM

The court first addresses APT's third cause of action for patent infringement. MarketDial moves to dismiss APT's patent infringement claim, arguing that the claimed invention's subject matter is not eligible to be patented. The court concludes that the claimed invention upon which APT brings its claim is directed to an abstract concept and that no inventive concept in the patent transforms it into an eligible application.

I. Section 101 and the Two-Part *Alice* Inquiry

Section 101 of the Patent Act provides that "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." 35 U.S.C. § 101. Implicit in this section, however, is an exception: laws of nature, natural phenomena, and abstract ideas are not patentable. *Alice Corp. Pty. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014).

Underlying this exception is a concern "that patent law not inhibit further discovery by improperly tying up the future use of these building blocks of human ingenuity." *Id.* (citation omitted). Essentially, the exception is intended to ensure that a patent does not preempt others from making use of "the basic tools of scientific and technological work." *Id.* (citation omitted). At the same time, the Supreme Court has recognized that all inventions, to some extent, "embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas" and that this exception the Section 101 must not be permitted to "swallow all of patent law." *Id.* at 217 (citations omitted).

In determining whether an invention is patent eligible under Section 101, the court must therefore "distinguish between patents that claim the '"buildin[g] block[s]"' of human ingenuity and those that integrate the building blocks into something more, thereby 'transform[ing]' them into a patent-eligible invention." *Id.* (citations omitted). This presents a particularly difficult task with respect to identifying inventions that incorporate abstract ideas. *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1331 (Fed. Cir. 2015) ("The third exception—abstract ideas—is more of a problem, a problem inherent in the search for a definition of an 'abstract idea' that is not itself abstract.").

To provide courts with guidance in determining the eligibility of a patent, the Supreme Court in *Alice Corp. Pty. v. CLS Bank International*, 573 U.S. 208 (2014), articulated a two-part inquiry. First, the court must "determine whether the claims at issue are directed to one of [those] patent-ineligible concepts." *Versata Dev. Grp.*, 793 F.3d at 1332 (quoting *Alice*, 573 U.S. at 217). Second, if the claims are directed to patent-ineligible subject matter, the court must determine "whether the elements of each claim, both individually and as an ordered combination, 'transform the nature of the claim' into a patent-eligible application." *BSG Tech LLC v. Buyseasons, Inc.*, 899

F.3d 1281, 1285 (Fed. Cir. 2018) (quoting *Alice*, 573 U.S. at 217). This second step is referred to as the search for an "inventive concept." *Alice*, 573 U.S. at 217.

Though it sometimes contains underlying issues of fact, patent eligibility under Section 101 is ultimately an issue of law. *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018). Thus, so long as there are no factual allegations that, taken as true, prevent resolution of the eligibility question as a matter of law, "[s]ubject matter eligibility under § 101 may be determined at the Rule 12(b)(6) stage of a case." *ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 765 (Fed. Cir. 2019) (citation omitted), *cert. denied*, 140 S. Ct. 983 (2020).

II. The '916 Patent

The '916 patent "relates to business initiative analysis systems, and more particularly, to methods, systems, and articles of manufacture for performing a segmented initiative analysis for initiatives implemented at selected business locations in order to identify in which other locations to implement the initiative." To better unpack the patent, the court reviews first the problem identified and then addresses the solution articulated by the patent.

A. The Problem Identified by the '916 Patent: Accurate Business Initiative Testing

The patent's specification provides that, "[f]or as long as retailers have been selling products and services, they have been seeking ways to increase profits." In order to do so, retailers create new business initiatives that they believe will increase their profits. These initiatives range from altering product prices to remodeling stores to changing the number of salespeople on the sales floor.

While retailers have traditionally relied upon their business instincts or anecdotal evidence to determine whether an initiative is worth launching, some have more recently sought to adopt a more structured and analytical approach. Rather than relying solely on intuition, retailers may test

a business initiative by implementing it at one or more locations, collecting performance metrics from those locations, and analyzing the collected data using "conventional software products."

Though this new approach may rely less on business instincts and more on data, the '916 patent notes that it is not immune to human error. In particular, the specification points out that retailers analyzing performance data must rely on their intuition in deciding how to best measure the impact of the business initiative on the performance data. For example, in conducting the test, the retailer must decide what sort of performance metrics to collect (for example, gross profit margins, changes in average sales, or number of products sold), from which business locations to collect the data, and what time of year to conduct the business initiative tests, among other things. These decisions are referred to as the test's "parameters."

These parameters form the crux of the problem identified by the '916 patent. In particular, the patent notes that the parameters selected for a business initiative test may influence the results of that test, thus skewing the test's findings. For example, if a retailer decides to test a business initiative at a set of stores, but he happens to run the test right before a major holiday, the timing of his test, rather than the business initiative itself, may influence the data that he collects. This inconsistency, created because something other than the business initiative influenced the performance data, is referred to as "noise." Parameter settings that create high levels of noise could cause the retailer to improperly believe that the business test initiative has resulted in improved performance metrics. The '916 patent provides that "there is a need for a system and method that automatically identifies one or more analytical parameters that filter out the most inconsistent data to maximize a retailer's ability to analyze the results of an initiative test."

B. Solving the Articulated Problem: Performing Virtual Tests on Virtual Test Sites

To solve the problem articulated above, the '916 patent teaches method, system, and computer-medium claims involving the process of "performing virtual tests on virtual test sites."

By performing these virtual tests, the patent allows retailers to identify parameter settings that create the least "noise" and thus optimize parameter settings for testing their business initiatives.

Claim 1 lays out the steps for conducting these virtual tests, providing

> [a] method for determining optimal parameter settings for business initiative testing software used for testing initiatives for business locations included in a business network, comprising,
>
> > [A] identifying, by a computer, a business initiative testing model having a set of parameter settings;
> >
> > [B] selecting a first parameter setting set for performing the virtual test, the first parameter setting set including a set of selected parameter setting options each respectively corresponding to one of the parameter settings for the business initiative testing model;
> >
> > [C] performing, by a computer, a virtual test on a set of virtual test sites, each virtual test site reflecting a selected business location in the business network, wherein each virtual test is a simulated business initiative test performed on test sites where no actual initiative test has been implemented at those test sites, and wherein the virtual test is performed on the virtual test sites using a variation of each parameter setting;
> >
> > [D] determining, by a computer, actual performance data associated with the set of virtual test sites;
> >
> > [E] determining, by a computer, actual performance data associated with a set of control group sites reflecting second selected business locations in the business network using the tested parameter settings;
> >
> > [F] determining a noise value for the first parameter setting set, the noise value reflecting an inconsistency between performance data associated, with the set of virtual test sites and performance data associated with the set of control group sites reflecting second selected business locations in the business network using the tested parameter settings;
> >
> > [G] determining, by a computer, a set of optimal parameter settings for the business initiative testing model based on results from the virtual test whereby the optimal parameter settings best minimize noise from the results; and

> [H] configuring, by a computer, the business initiative testing model using the optimal parameter settings to test a business initiative for application in the business network.[2]

In layman's terms, the process provided for in the '916 patent begins with choosing a business initiative testing model with a selected set of parameters, such as the type of performance data collected, the geographic locations of the stores, or the time of year that the test is performed. Then, rather than merely implementing this test, as a retailer would traditionally do, the patent provides a process for "testing" parameter settings to determine whether they are the optimal parameter settings for the business initiative testing model.

This testing process consists of selecting virtual test sites and control sites. These "sites" are historical datasets for real-world business locations. The patent then teaches the performance of "tests" on these sites, or the analysis of the locations' historical data to determine the locations' performance metrics.[3] The performance metrics for the virtual test sites and the control sites are compared. Because no actual business initiative has been tested at the virtual test sites, the historical performance data from the virtual test sites should be no different from the historical performance data pulled from the control sites. Any difference in historical performance data must be attributable to some influence present in the parameter settings options selected. This inconsistency is referred to as "noise."

The patent then consists of storing this noise value and iteratively "testing" a large number of parameter setting options in this same way. The noise values for these different tests are also

[2] Though the claim is broken up into the same sections included here, the text of Claim 1 does not include the bracketed letters. The court includes the bracketed letters for clarity and because both parties did so in their briefing.

[3] As can be seen in Claim 1, the specifics of this analysis are not provided for in the patent. Rather, the process articulated in the patent appears to consist of any process that permits the patent-user to analyze the data and obtain the relevant performance metrics and, as a result, "noise."

stored and the optimal parameter setting, or the parameter setting that creates the least "noise," can be identified.

A business initiative testing model formatted in line with the identified optimal parameter settings should, according to the patent, provide the retailer with the most accurate data regarding the business initiative's impact on the performance data. Thus, the retailer will have a better understanding of the business initiative's effectiveness and will have the capacity to select the most effective business initiative, resolving the problem articulated in the patent's specification.

III. Preliminary Issues

Prior to engaging in the two-step *Alice* inquiry, the court first addresses two preliminary issues briefly noted in the parties' briefing. First, the court considers the use of Claim 1 as a representative claim in MarketDial's motion to dismiss. Second, the court addresses APT's contention that MarketDial improperly engaged in claim construction in its motion to dismiss. Neither of these preliminary issues prevents the court from engaging in the *Alice* inquiry.

A. Representative Claims

To determine whether an invention is patent eligible, a court need not always examine each claim individually. Rather, the court "may treat a claim as representative in certain situations, such as if the patentee does not present any meaningful argument for the distinctive significance of any claim limitations not found in the representative claim or if the parties agree to treat a claim as representative." *Berkheimer*, 881 F.2d at 1365.

In its motion to dismiss, MarketDial asserts that Claim 1 is representative of all thirty-five claims present in the '916 patent. APT provides absolutely no argument on the issue of representative claims in its briefing beyond stating, in a footnote, that "APT does not agree that Claim 1 is representative of all of the claims." While this demonstrates that the parties have not agreed to treat a claim as representative, it certainly does not represent "any meaningful argument

for the distinctive significance of any claim limitations not found in the representative claim." *Berkheimer*, 881 F.2d at 1365.

Despite APT's failure to provide any justification for differentiating between the claims, or indeed any explanation regarding which claims are insufficiently represented by Claim 1, the court engages in the representative claim inquiry for completeness. A court may decide patent eligibility based on a representative claim where "all the claims are substantially similar and linked to the same abstract idea." *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass'n*, 776 F.3d 1343, 1348 (Fed. Cir. 2014). The claims of the '916 patent meet this requirement. Claim 1 is therefore an appropriate representative claim.

As the court has already noted, Claim 1 of the '916 patent teaches a method for "determining optimal parameter settings for business initiative testing software used for testing initiatives for business locations included in a business network." Claims 2 through 17 are dependent claims of Claim 1. Claim 2 provides, for example, that performing virtual tests as is referenced in Claim 1 includes performing a series of tests for each possible combination of parameter settings. Similarly, Claim 8 provides that iteratively performing the virtual tests as is articulated in Claim 1 includes storing a noise value for each iteration. In short, Claims 2 through 17 are directed toward the same idea as Claim 1 and merely provide clarification regarding some of the steps of Claim 1. The court has not identified, nor has APT pointed to, any additional concepts in dependent Claims 2 through 17 that require analysis beyond that which can be done with respect to Claim 1.[4] Claim 1 sufficiently represents them.

[4] At oral argument, APT asserted that Claim 1 is not representative of the other thirty-four claims. Again, it provided no compelling explanation for this argument. Instead, APT argued that Claims 4, 8, 10, 21, 28, and 30, all claims which teach iterative testing and storing test results, are not represented by Claim 1. APT failed to explain why the concept of repeating the process articulated

Claim 18, too, is adequately represented by Claim 1. Claim 18 "recite[s] substantially the same concept but do[es] so in the context of a[] . . . system." *In re TLI Commc'ns LLC Patent Litig.*, 823 F.3d 607, 610 (Fed. Cir. 2016). In fact, beyond the difference in claim type, the two claims recite almost identical steps.[5] Thus, Claim 18 adds nothing to Claim 1 for purposes of the *Alice* analysis. Similarly, Claims 19 through 33, like Claims 2 through 17, are merely dependent claims providing clarifications regarding the steps of Claim 18. They do not add any new limitations or "inventive concepts" to Claim 18. APT has provided no argument to the contrary.

Claim 34, like Claim 18, merely recites substantially the same concept as Claim 1, but does so in the context of a computer-readable medium. Beyond the difference in claim type, Claims 1 and 34 lay out almost identical steps. For example, both provide that the claims consist of "performing, by a computer, a virtual test on a set of virtual test sites, each virtual test site reflecting a selected business location in the business network, wherein each virtual test is a simulated business initiative test performed on test sites where no actual initiative test has been implemented at those test sites" and "determining, by a computer, a set of optimal parameter settings for the business initiative testing model based on results from the virtual test whereby the optimal parameter settings best minimize noise from the results." Claim 34 is thus sufficiently represented by Claim 1 for the purposes of the Section 101 analysis. *See Bancorp. Servs., L.L.C. v. Sun Life Assur. Co. of Canada (U.S.)*, 687 F.3d 1266, 1277 (Fed. Cir. 2012) (noting the appropriateness of treating a method claim as representative of a media claim where the claims recited the same seven steps). As with the other claims, APT provides no argument to the contrary.

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in Claim 1 and saving the results alters the Section 101 analysis. The court concludes that it does not. Claim 1 sufficiently represents the claimed invention.

[5] For example, where Claim 1 recites "determining, by a computer, actual performance data associated with the set of virtual test sites," Claim 18 recites a system including a computer configured to "determine actual performance data associated with the set of virtual test sites."

Finally, Claim 35 teaches "[a] method for testing business initiatives." Essentially, Claim 35 restates the broader method articulated in Claim 1 and adds the step of "testing, by a computer, the business initiative using the configured business initiative testing model to produce results reflecting a predicted performance of the business initiative if applied to the set of business locations." Claim 35 closely resembles Claim 1, is directed at the same idea as Claim 1, and adds nothing more than the carrying out of the business initiative test. This additional step, performing a business initiative test, does not alter the *Alice* inquiry. Again, APT provides no argument to the contrary. Claim 35 is therefore sufficiently represented.

APT has failed to articulate any reason for its objection to the use of Claim 1 as the representative claim. In addition, APT refers only to Claims 1 and 18 in its briefing and appears to treat the two claims as one.[6] The court concludes that Claim 1 is an appropriate representative claim for the '916 patent, as all of the other claims are directed toward the same concept and none of the other claims contain any additional elements or limitations that alter the *Alice* inquiry.

B. Claim Construction

Next, the court addresses APT's allegation that MarketDial has improperly engaged in claim construction. "Although the determination of patent eligibility requires a full understanding of the basic character of the claimed subject matter, claim construction is not an inviolable prerequisite to a validity determination under § 101." *Content Extraction*, 776 F.3d at 1349; *see also Bancorp. Servs.*, 687 F.3d at 1273. The Federal Circuit has suggested that when a party

[6] APT references Claims 1 and 18 together eight times. For example, APT argues that "Claims 1 and 18 are not directed to a longstanding method of organizing human activity or commercial practice like other claims found patent-ineligible" without articulating any difference in the analysis necessary to reach this conclusion. Claim 18 is only independently mentioned three times, twice in the context of describing the earlier patent prosecution and once to explain that Claim 18 teaches a system while Claim 1 teaches a method. Thus, though both claims are mentioned in APT's briefing, the claims are functionally treated as one.

contends that claim construction must precede the Section 101 analysis, that party must identify which terms require construction and explain how construing those terms would change the *Alice* analysis. *See Cyberfone Sys., LLC v. CNN Interactive Grp., Inc.*, 558 F. App'x 988, 992 n.1 (Fed. Cir. 2014).

APT asserts that MarketDial improperly construed the terms "noise," "virtual test," and "determining . . . a set of optimal parameter settings for the business initiative testing model." Beyond pointing to the '916 patent itself, APT does not provide the allegedly appropriate interpretations for these terms. This suggests that APT's argument does not actually require claim construction but is instead merely an allegation that MarketDial has misrepresented the '916 patent in its briefing. All the same, the court reviews the allegedly construed terms and concludes that it will rely on the definitions contained in the '916 patent, rather than those set forth in MarketDial's briefing. Claim construction is not necessary.

1) "Noise"

In its motion to dismiss, MarketDial states that, "[i]n essence, 'noise' refers to anything that affects the result of the business initiative test, other than the tested initiative itself." APT asserts that this is not the proper definition of "noise" and that the proper definition can be found in the '916 patent.

The definitions put forth by APT through its citations to the '916 patent are as follows. First, "[n]oise may be a quantified measurement of inconsistent performance data for sites used in the analysis performed by the model." Second, "noise may be represented as a value reflecting an inconsistency in the performance data for the virtual test sites in relation to the control site group." Finally, "[n]oise reflects a quantified measurement of inconsistent performance data for sites used in the analysis performed by a business initiative testing model." In addition, the patent repeatedly

notes that the performance data for the virtual test sites and control site group should be the same and that any identified difference is quantified as "noise."

The court is unable to identify a significant difference between these definitions and the one articulated by MarketDial. It appears that MarketDial's description of "noise" was merely an attempt to discuss the patent in non-patent terms, rather than an attempt to construe the term. However, to ensure that no improper claim construction occurs at this stage, the court clarifies that it will rely on the definitions of "noise" provided in the patent.

2) "Virtual Test"

APT also raises concerns regarding MarketDial's alleged attempt to construe the term "virtual test." In its motion, MarketDial defines "virtual test" as "in practice nothing more than mathematically testing parameters using historical data before the retailer begins testing the business initiative." APT asserts that this is an oversimplification of the "virtual testing" described in the patent.

While APT challenges MarketDial's characterization of "virtual test" as an oversimplification, APT provides no alternative definition for the term. To address APT's concern, however, for the purposes of this motion to dismiss, the court will not blindly accept MarketDial's definition of "virtual test" and will instead rely on the description of "virtual test" in the '916 patent. This again appears to be no more than a criticism of MarketDial's characterization of the patent, rather than an actual claim construction dispute.

3) "Determining a Set of Optimal Parameters"

Finally, APT alleges that MarketDial improperly construed "determining . . . a set of optimal parameter settings for the business initiative testing model" in its motion to imply that a human could perform the steps. APT insists that this step, contrary to MarketDial's characterization, actually requires "selecting a set of optimal parameter settings that best minimize

noise from the results." APT asserts that MarketDial's improper characterization of the step influences the Section 101 analysis because it suggests that a human could perform the tasks and that the patent is therefore directed to an abstract concept.

As was the case with APT's other arguments, APT does not provide an alternative definition for the challenged term. Further, while APT alleges that a human cannot perform the step, it provides no support for this contention beyond a citation to its own Complaint in which APT similarly alleges, without any support, that a human cannot perform the step.

It does not appear that APT has raised a claim construction issue here. Rather, APT again challenges MarketDial's characterization of the '916 patent. To ensure that no improper claim construction occurs, however, the court will again rely on the description of the '916 patent in the patent itself, rather than on the description of the '916 patent contained in MarketDial's briefing. Thus, the court will determine whether the disputed step could be completed by a human based on the description of the step provided in the patent, rather than based on the allegations in MarketDial's briefing or the conclusory statement in APT's Complaint.

For the purposes of this motion to dismiss, the court is not entirely convinced that APT has identified a claim construction dispute. Further, APT provides no definitions for the disputed terms beyond those provided in the patent. All the same, the court clarifies that it will do as APT asks and look to the definitions articulated in the patent itself. *See Content Extraction*, 776 F.3d at 1349 (noting that claim construction was not required to complete the Section 101 analysis and that the district court properly construed all disputed terms in the light most favorable to the non-movant). Thus, the court may conduct the Section 101 analysis at the motion to dismiss stage without engaging in claim construction.

IV. *Alice* Step One

The first step of the *Alice* inquiry requires the court to determine whether the '916 patent is "directed to" a patent-ineligible concept. *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016). At some level, all inventions embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas. *ChargePoint*, 920 F.3d at 765. "Thus, at step one, 'it is not enough to merely identify a patent-ineligible concept underlying the claim.'" *Id.* (citation omitted). Instead, the court "must determine whether that patent-ineligible concept is what the claim is 'directed to.'" *Id.* (citation omitted).

"The Supreme Court has not established a definitive rule to determine what constitutes an 'abstract idea' sufficient to satisfy the first step of the [*Alice*] inquiry." *Enfish*, 822 F.3d at 1334 (citation omitted). Instead, "both [the Federal Circuit] and the Supreme Court have found it sufficient to compare claims at issue to those claims already found to be directed to an abstract idea in previous cases." *Id.*

In addition, courts have "crafted various tools to analyze whether a claim is 'directed to' [an] ineligible subject matter." *ChargePoint*, 920 F.3d at 766. For example, "[w]hen evaluating computer-related claims, courts look to whether the claims 'improve the functioning of the computer itself,' or whether 'computers are invoked merely as a tool' to implement an abstract process." *PurePredictive, Inc. v. H20.AI, Inc.*, No. 17-CV-3049, 2017 WL 3721480, at *3 (N.D. Cal. Aug. 29, 2017) (*quoting Alice*, 134 S. Ct. at 2359; *Enfish*, 822 F.3d at 1336), *aff'd sub nom. Purepredictive, Inc. v. H2O.ai, Inc.*, 741 F. App'x 802 (Fed. Cir. 2018). Generally, claims directed to "improv[ing] an existing technological process" or "purport[ing] to improve the functioning of the computer itself" may not succumb to the abstract idea exception. *Id.* (quoting *Alice*, 573 U.S. at 223–25). On the other hand, patents directed toward "fundamental economic and conventional

business practices" have been held to be patent ineligible, even if they invoke the use of computers. *Enfish*, 822 F.3d at 1335; *see also TLI Commc'ns*, 823 F.3d at 611 ("[N]ot every claim that recites concrete, tangible components escapes the reach of the abstract-idea inquiry."); *Versata Dev. Grp., Inc.*, 793 F.3d at 1335 ("Courts have examined claims that required the use of a computer and still found that the underlying, patent-ineligible invention could be performed via pen and paper or in a person's mind.").

Further, though the language of the claims must control the inquiry, the Federal Circuit has "found the specification helpful in illuminating what a claim is 'directed to.'" *ChargePoint*, 920 F.3d at 766 (citations omitted). The court may, for example, look to the specification to better understand "what the patent describes as the invention." *Id.* at 767. In addition, the specification may help the court identify "the problem facing the inventor." *Id.* at 767–68 (citation omitted) (determining that the patent was directed at an abstract idea of creating a communication network for electric car charging stations in part because the problem identified in the specification "was the lack of a communication network that would allow drivers, businesses, and utility companies to interact efficiently with the charging stations"); *see also TLI Commc'ns*, 823 F.3d at 611–13 (concluding that the patent was directed to an abstract concept because the problem facing the inventor related to the recording, administration, and archiving of digital images and not to the specific technical components mentioned in the specification and claims).

A. Application of *Alice* Step One to the '916 Patent

APT asserts that the '916 patent is directed toward optimizing the functionality of software, rather than toward a conventional business practice or a fundamental economic concept. Specifically, APT contends that the patent teaches the "performing of virtual tests on virtual test sites," thus improving software and computer functionality. APT also asserts that the claimed invention more efficiently filters inconsistent data and addresses problems with "big data."

MarketDial, to the contrary, argues that the '916 patent is directed to an abstract concept: optimizing parameter settings for business initiative tests.

The court concludes that the '916 patent is directed to an ineligible abstract concept. First, the patent specification and claim language indicate that the patent is directed to helping retailers optimize the parameters for their business initiative tests, a conventional business practice. Second, even if APT's argument has merit, "performing virtual tests on virtual test sites" is an abstract concept, rather than a patent eligible improvement to software functionality. This claimed invention therefore seeks to patent "a process that qualifies as an 'abstract idea' for which computers [or software] are invoked merely as a tool." *Enfish*, 822 F.3d at 1336.

1) The '916 Patent is Directed Toward Optimizing Parameter Settings for Business Initiative Testing

Having examined the '916 patent specification and claim language, the court concludes that the patent is directed to the abstract concept of optimizing parameters for business initiative testing.

a) The Specification's Treatment of the Patent

As the court has noted, the specification can be "helpful in illuminating what [the patent] is directed to." *ChargePoint*, 920 F.3d at 766. The court therefore looks to the '916 patent's specification, first to identify the problem which the inventor sought to resolve and then to better understand "what the patent describes as the invention." *Id.* The specification in this case suggests that the '916 patent is directed toward the abstract concept of optimizing parameter settings for business initiative testing.

Though not dispositive of the "directed to" inquiry, the problem identified by the patent can provide the court with significant insight into the patent's focus. *ChargePoint*, 920 F.3d at 767. In this case, the specification notes that "there is a need for a system and method that

automatically identifies one or more analytical parameters that filter out the most inconsistent data to maximize a retailer's ability to analyze the results of an initiative test." This need allegedly stems from retailers' improper reliance on intuition in deciding what sorts of parameters to use when they test business initiatives. Thus, the problem identified by the patent is a retailer's inability to conduct sufficiently accurate business initiative tests and resulting inability to select the best business initiatives to run. The solution articulated by the patent is intended to help retailers "better identify those initiatives to extend to certain locations that will provide the most anticipated profit gains." This strongly suggests that the '916 patent is directed toward a conventional business practice of improving business initiative testing.

The specification's discussion of the patent itself, rather than the problem to which it is directed, further suggests that the '916 patent is directed to the abstract concept of optimizing parameters for business initiative testing. The court looks both to what the specification states and what it does not. *See ChargePoint*, 920 F.3d at 768.

The specification articulates a process of iteratively "performing virtual tests on virtual test sites" in order to identify the noise associated with different parameter settings.[7] As the court has noted, the virtual test process broadly consists of analyzing historical data collected from business locations and determining whether the parameter settings being "tested" influence that data in any way. The specification provides that, once these tests are completed, the optimal parameter settings are identified and the business initiative testing model can be configured using these settings. It is

[7] The crux of APT's argument is that the patent is in fact directed to this virtual test process and that the virtual test process represents an improvement to software and computer functioning. The court addresses the virtual test process in greater detail below and concludes that it, like optimizing parameter settings for business initiative tests, is an abstract concept.

clear that the purpose of the '916 patent is to identify these optimal parameter settings so that retailers can accurately test their business initiatives. This is a business practice.

Though the specification mentions that technical components, such as the computer system, network, server, and memory, are necessary to execute these tests, it describes these components vaguely and in terms of their basic functions. For example, the specification notes that the server "may be a computer system such as a desktop computer, workstation, or any other similar server side computing system that performs one or more server-side processes." It goes on to describe generic computing system attributes and, later in the specification, provides that a general-purpose computer can be configured to perform the invention. At no point, however, does the specification discuss the technical details of these components or suggest that the functionality of these components will be improved. *See ChargePoint*, 920 F.3d at 768 (noting that the patent's specification never suggested that the tangible component was itself improved from a technical perspective, or that it would operate any differently due to the patent).

Similarly, the specification provides very little information about the software necessary to implement the claimed invention, noting that "[a]ny number of programming languages may be utilized without departing from the scope of the present invention." Further, in describing the process by which historical data is analyzed, the specification notes that different types of modeling methodologies can be used to predict performance values of the test and control group sites, including "any other type of software model that may be used to analyze the information." The focus is on the software's role in performing the invention, rather than on any technical details about how the software itself functions.

The components discussed in the specification are merely tools necessary to create a technological environment within which the claimed invention can be implemented. This is made

clear by the specification's note that the claimed invention "may be implemented in various environments" and that the environments "may be specially constructed for performing various processes and operations of the invention or they may include a general purpose computer or computing platform selectively activated or reconfigured by program code to provide the necessary functionality." Further, it provides that "[t]he processes disclosed herein are not inherently related to any particular computer or other apparatus, and may be implemented by a suitable combination of hardware, software, and/or firmware." This broad language demonstrates that the technical components are not the focus of the patent; they are merely the tools necessary to implement the patent.

Based upon the specification, it appears that the '916 patent is not directed to the improvement of any of the technical components it discusses. Rather, it is directed to the optimization of parameter settings for retailers' business initiative tests.

b) The Claim Language's Treatment of the Patent

The claims themselves similarly demonstrate that the '916 patent is directed to the abstract concept of optimizing parameter settings for business initiative tests. As has already been noted, Claim 1 provides a "method for determining optimal parameter settings for business initiative testing software used for testing initiatives for business locations included in a business network." This method consists of selecting a set of parameter settings to test, performing a virtual test on virtual test sites, determining the performance data at those sites, and comparing that data with the performance data from a set of control group sites. This process is performed iteratively, testing a range of parameter settings. Once the testing is complete, the noise values for the different parameter settings are compared and the optimal setting can be identified. The claim concludes with configuring the business initiative testing model using these optimal parameter settings.

Like the specification, the claim language is focused on identifying optimal parameter settings so that business initiatives can be tested as accurately as possible. Further, though the claim makes mention of "software" and "a computer," the claim provides no further details about these components' functionality. Instead, these technical components are described based on their function in the implementation of the claimed invention. *See TLI Commc'ns*, 823 F.3d at 612 ("The specification fails to provide any technical details for the tangible components, but instead predominately describes the system and methods in purely functional terms."). It is quite clear that, though the patent provides that a computer and software program are necessary to implement the claimed invention, the patent is directed to reaching this final step: optimizing parameter settings to test business initiatives.

Further, though the court has concluded that Claim 1 is representative of the remaining claims, the court notes that none of the other claims provide further information about the software, hardware, or firmware used to implement the claimed invention. Instead, the claims discuss the process of iteratively "performing virtual tests on virtual test sites." The claims provide no details regarding how this process, which will be addressed in greater detail below, impacts software or computer functionality. Nor do any of the claims provide further details about the other technical components of the claimed invention.

A patent does not escape abstractness merely because it recites technical components that are configured to implement an abstract concept. *Alice*, 573 U.S. at 224. Otherwise, patent eligibility would become dependent solely on the draftman's art. *Id.* APT seeks to characterize its virtual test process as a technical improvement to software. But the patent merely recites technical components and then provides that they must perform or be configured to implement parameter setting optimization. The claim language's repeated discussion of testing parameter settings for

business initiative tests without any discussion of the technical components' actual functioning demonstrates that the patent is directed to the former, rather than to the latter.

c) The Performance of Virtual Tests on Virtual Test Sites Is an Abstract Concept

The court has concluded that the '916 patent is directed to the abstract concept of optimizing parameter settings for business initiative tests. APT argues, however, that the patent is directed to "performing virtual tests on virtual test sites." Because the virtual test process allegedly improves software and computer functionality, APT asserts that the patent is directed toward an eligible subject matter. This assertion does not alter the court's conclusion. "[C]laims focused on 'collecting information, analyzing it, and displaying certain results of the collection and analysis' are directed to an abstract idea." *SAP America, Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1167 (Fed. Cir. 2018) (quoting *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016)), *cert. denied,* 139 S. Ct. 2747 (2019). The virtual test process consists of nothing more than historical data collection and analysis. Thus, contrary to APT's contention, the virtual test process is an abstract concept.

The court has already addressed the virtual test process as laid out in the specification and claims. It involves selecting a model and parameter settings, then testing those parameter settings to determine whether those settings influence the data, or whether they create "noise." The virtual testing process essentially consists of analyzing historical data collected from business locations and determining whether the parameter settings being "tested" influence that data in any way. Multiple parameter settings are tested iteratively and the "noise" values stored for each test, so that the parameter settings that create the least noise can be identified.

The '916 patent's description of "performing virtual tests on virtual test sites" is not a specific process involving an identifiable analysis. Rather, the patent broadly describes any analysis that ends in a particular result: parameter setting optimization. For example, the specification provides that the patent applies to "different types of modeling methodologies that are used to predict performance values of the test and/or control group sites, such as linear regression, staged linear regression, neural network basic train, neural network stepwise regression, decision tree, K-means similar site modeling, and any other type of software model that may be used to analyze the information." Thus, no specific analytical or statistical model is identified in the patent. Further, the process of "testing" the parameter settings involves analyzing different business locations' historical data. No specific, technical details regarding the exact sort of analysis is provided. Instead, the concept broadly encompasses historical data analysis.

Further bolstering this characterization of the patent, the specification provides that "the virtual test processes described herein are not limited to the sequences, steps, and systems shown in [the figures herein]." "Additional, fewer, and different processes and elements may be implemented to configure and run the virtual test processes to identify noise value for given parameter settings." Any data analysis process by which the noise levels associated with parameter settings are discerned falls within the scope of the '916 patent. The concept of "performing virtual tests on virtual test sites" is a results-oriented one. The patent fails to clearly articulate the process by which that result is obtained and instead purports to encompasses all routes to the result.

The Federal Circuit has held that patents directed to a particular result and containing no restriction regarding how that result is accomplished tend to be overbroad and ineligible. *ChargePoint*, 920 F.3d at 769 ("[T]he broad claim language would cover any mechanism for implementing network communication on a charging station, thus preempting the entire industry's

ability to use networked charging station."); *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1316 (Fed. Cir. 2016) ("[W]hen a claim directed to an abstract idea 'contains no restriction on how the result is accomplished . . . [and] [t]he mechanism . . . is not described, although this is stated to be the essential innovation[,]' then the claim is not patent-eligible." (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1348 (Fed. Cir. 2015))).

The exceptions to Section 101 are intended to ensure that patent law does "'not inhibit further discovery by improperly tying up the future use of' these building blocks of human ingenuity." *Alice*, 573 U.S. at 216 (quoting *Mayo*, 666 U.S. at 73). The performance of virtual tests on virtual test sites is a results-oriented, overbroad, and ineligible concept. To grant a patent on the concept as it is articulated in the '916 patent would be to preempt any method of analyzing historical data to determine how certain parameter settings influence that data. This concept is not a patentable improvement to computer functionality; it merely preempts data analysis in the context of business initiative tests. *See OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362–63 (Fed. Cir. 2015) ("[T]hat the claims do not preempt all price optimization or may be limited to price optimization in the e-commerce setting do not make them any less abstract.").

2) Cases Addressing Patents Similar to the '916 Patent

In addition to reviewing the specification and claim language, the court looks to other cases addressing similar patents to confirm its conclusion that the '916 patent is directed to an abstract concept. APT asserts that the '916 patent is similar to the patents addressed by the Federal Circuit in *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016). The claims in *Enfish* were directed toward a "self-referential table," which the court concluded was a functional improvement to database structuring. *Id.* at 1336. Conventional database structures required different types of data to be stored in different tables. *Id.* at 1330. For example, a dataset might include three elements of information: document titles, the names of those documents' authors, and the authors' places of

employment. *Id.* at 1331. A conventional data structure would require that each of those three elements of information be stored in three separate tables. *Id.* Thus, the document table would include the document's title and, rather than also including the author's name, would reference the location of the author's name in the author table. *Id.*

The claimed invention in *Enfish* represented an innovative model of data for a computer base that changed the way these elements of information related to one another. *Id.* at 1330. This new method of structuring data allowed for the storage of all entity types in a single table. *Id.* This alteration to conventional database structures meant that the claims were "directed to a specific improvement to the way computers operate." *Id.* at 1336. The self-referential table patented in *Enfish* functioned differently than conventional database structures. *Id.* at 1337. Further, the claims were not merely directed to the abstract idea of "storing, organizing, and retrieving memory in a logical table," *id.* at 1337, and though the patent could be implemented on a generic computer, it did not merely teach the "use of an abstract mathematical formula on any general purpose computer," *id.* at 1339 (citations omitted) (collecting cases). Rather, the self-referential table recited in the claims constituted a "specific type of data structure designed to improve the way a computer stores and retrieves data in memory," and the claims were directed to "a specific implementation of a solution to a problem in the software arts." *Id.* at 1339. "[T]he claims [were] not simply directed to any form of storing tabular data." *Id.* at 1337.

The court's foregoing analysis of the '916 patent demonstrates the significant differences between the *Enfish* claims and claimed invention in this case. While the *Enfish* claims were "not simply directed to any form of storing tabular data," and instead identified a specific model of data storage to solve a problem in the software arts, *id.* at 1337, the '916 patent is in fact directed to any process of using data to solve the problem of retailers' reliance on their intuition to select parameter

settings. The process taught by the '916 patent encompasses, for example, the use of "any . . . type of software model that may be used to analyze the information." Further, unlike the *Enfish* claims, the '916 patent makes no mention of how the technical components used to implement the invention actually work.

APT's attempt to parallel its patent with the claims in *Enfish* resembles a patent-holder's unsuccessful argument in another Federal Circuit decision, *BSG Tech LLC v. Buyseasons, Inc.*, 899 F.3d 1281, 1285 (Fed. Cir. 2018). The patents at issue in *BSG Tech* were broadly related to systems and methods for indexing information stored in wide access databases. *Id.* at 1283. The claimed invention sought to guide user inputs to maintain consistency in how different users describe items. *Id.* at 1284. The patent-holder insisted that its claims, like the self-referential table in *Enfish*, focused on a non-abstract improvement to database functionality, as the claimed invention improved the quality and organization of information in the database. *Id.* at 1287–88. But the *BSG Tech* claims were unrelated to how databases function and did not, for example, recite any improvement in the way that databases store or organize information. *Id.* The court acknowledged that the claimed invention may in fact result in improvements to the quality of information stored in a database but concluded that this was not "equivalent to an improvement in the database's *functionality*." *Id.* (emphasis added). The court therefore concluded that the alleged benefits of the *BSG Tech* invention flowed from "performing an abstract idea in conjunction with a well-known database structure." *Id.* at 1288. Unlike the *Enfish* patents, the idea was not patent-eligible.

APT's argument fails for the same reason that the *BSG Tech* patent-holder's argument failed. Like the patent-holder in *BSG Tech*, APT asserts that its patent represents an improvement in computer and software functionality because it filters data more efficiently. But any benefits

allegedly created by the '916 the patent flow not from any technical improvement to computer or software functionality, as is made clear by the patent's complete failure to discuss the technical details of the computer and software used to implement the patent. Instead, these alleged benefits flow from the abstract concept of the data analysis process discussed in the patent, or the "performing virtual tests on virtual test sites" to optimize parameter settings in an unspecified technological environment. The analysis in *Enfish* is therefore dissimilar.[8]

Instead, the '916 patent more closely resembles the patent addressed by the Federal Circuit in *OIP Technologies, Inc. v. Amazon.com, Inc.*, 788 F.3d 1359 (Fed. Cir. 2015). The patent in *OIP* related to a method of price optimization in an e-commerce environment. *Id.* at 1360. It was intended to improve upon merchandisers' traditional practice of manually determining prices based on "their qualitative knowledge of the items, pricing experience, and other business policies." *Id.* at 1360–61. The patent purported to do so "through automatic estimation and measurement of actual demand to select prices." *Id.* at 1361. The Federal Circuit summarized claim 1 of the patent to include "(1) testing a plurality of prices; (2) gathering statistics generated about how customers reacted to the offers testing the prices; (3) using that data to estimate outcomes

[8] APT also compares the '916 patent with the Federal Circuit's analysis in *McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299 (Fed. Cir. 2016). The patents in *McRO* sought to automate the task of matching three-dimensional animated characters' facial expressions with the characters' dialogue. *McRO*, 837 F.3d at 1307. To do so, the claimed invention articulated a process of automating facial expression movement in animated characters through sets of "rules" representing sequences of facial positions. *Id.* at 1304, 1307. Unlike the '916 patent, which purports to encompass all data analysis processes by which optimal parameter settings can be discerned, the claimed invention in *McRO* did not "improperly purport to cover all rules," as the claimed rules were "limited to rules with certain common characteristics, i.e., a genus." *Id.* at 1313. In addition, the *McRO* court noted that the automation went "beyond merely 'organizing [existing] information into a new form' or carrying out a fundamental economic practice." *Id.* (quoting *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014)). The same cannot be said of the '916 patent, which does not go beyond organizing existing data into a new form or analyzing historical data to identify "noise" levels within the data. *McRO* is thus also distinguishable.

(i.e., mapping the demand curve over time for a given product); and (4) automatically selecting and offering a new price based on the estimated outcome." *Id.* at 1361. The court noted that the additional dependent claims added various computer elements to the patent. *Id.*

Looking to the patent's specification and claim language, the *OIP* court concluded that the patent was directed to the economic concept of offer-based price optimization. *Id.* at 1362. Further, it noted that the fact that the claims "[did] not preempt all price optimization or may [have been] limited to price optimization in the e-commerce setting [did] not make them any less abstract." *Id.* at 1362–63. In short, the application of the abstract concept, offer-based price optimization, to a narrower context did not change the court's analysis.

Similarly, the '916 patent is broadly directed to the business practice of finding the best way to conduct business initiative tests. Like the patent in *OIP*, the '916 patent teaches data analysis for the purpose of predicting what parameter settings will least interfere with business initiative tests. The fact that the '916 patent makes use of software, computers, and other technical components to complete this analysis, or "perform virtual tests on virtual test sites," does not alter the fact that the patent is directed to parameter setting optimization, just as the *OIP* patent's use of technology to "map[] the demand curve over time for a given product" did not alter the fact that the patent was directed to price optimization. *Id.* at 1361.

The '916 patent can also be compared to the patent addressed by the Northern District of California in *PurePredictive, Inc. v. H20.AI, Inc.*, No. 17-CV-03049, 2017 WL 3721480, at *3 (N.D. Cal. Aug. 29, 2017).[9] The patent in *PurePredictive* was related to predictive analytics

[9] The Federal Circuit affirmed the district court's decision without an opinion under Federal Rule of Civil Procedure 36 in *Purepredictive, Inc. v. H2O.ai, Inc.*, 741 F. App'x 802 (Fed. Cir. 2018). Though neither the district court decision nor the unpublished Federal Circuit decision is binding on this court, the court finds the rationale articulated by the district court in *PurePredictive* compelling.

software. *Id.* at *1. It articulated a need for "an apparatus, system, method, and computer program product to generate a predictive ensemble in an automated manner . . . regardless of the particular field or application, with little or no input from a user or expert." *Id.* at *1. The court identified three steps to the patent:

> First, it receives data and generates 'learned functions,' or, for example, regressions from that data. Second, it evaluates the effectiveness of those learned functions at making accurate predictions based on the test data. Finally, it selects the most effective learned functions and creates a rule set for additional data input.

Id. at *1 (citations omitted). The court concluded that all three of these steps were abstract mathematical concepts. *Id.* at *5. The first step, generating learned functions or regressions from data, or "the basic mathematical process of, for example, regression modeling, or running data through an algorithm," is an abstract concept. *Id.* That the claimed invention completed this process at a far faster rate than a human being could did not alter its abstractness. *Id.* ("While PPI claims that this shows it would be impossible for a human to perform such a task, just because a computer can make calculations more quickly than a human does not render a method patent eligible."). Similarly, the court concluded that the second and third steps, evaluating the functions' effectiveness and selecting the most effective one, were nothing more than abstract mathematical concepts. *Id.* Thus, the court concluded that the patent was "directed to the patent-ineligible abstract concept of testing and refining mathematical algorithms." *Id.*

In addition, even accepting the *PurePredictive* patent-holder's argument that the patent was directed toward a computer related technology, the court concluded that the patent-holder could not "show that its claims improve the functioning of a computer-related technology rather than use computers as a tool." *Id.* The court noted that, though the patent referenced computers, these passing references only demonstrated that the patent used the computers for implementation of the patent. *Id.*

The parallels between the *PurePredictive* patent and the '916 patent are clear. Like the *PurePredictive* patent, the '916 patent articulates a process of "performing virtual tests on virtual test sites." This includes receiving business locations' historical data, analyzing the data to determine different parameter settings' influence on the data (or "noise" values), evaluating which parameter settings result in the lowest noise values, and selecting the most effective parameter settings. Like *PurePredictive*, APT argues that its patent cannot be performed by humans because large datasets make it infeasible for humans to complete the patent's steps. But this argument mirrors the rejected argument in *PurePredictive*. The fact that a computer can process much greater quantities of data at a much greater speed than humans does not make the patent eligible.

Further, as the court in *PurePredictive* concluded, the passing references to computers "performing" steps throughout the patent does not mean that the patent is directed toward eligible improvements to computer functionality. Though the '916 patent mentions the use of software, computers, memory structures, and other technical components, it is clear that the technology is merely a tool for achieving the actual purpose of the invention, optimizing the parameter settings for business initiative testing. As the specification acknowledges, the claimed invention can be implemented in "various environments." Any component that can "execute" the articulated invention suffices for purposes of the patent. Like the patent in *PurePredictive*, the '916 patent is directed to an abstract concept, not toward improvements in computer or software functionality.

3) The Alleged Benefits of the '916 Patent Do Not Alter the Analysis

Finally, APT asserts that the patent is eligible because it teaches a "technical solution aimed at solving a 'big data' problem of recognizing and filtering inconsistent data." This argument does not change the court's analysis.

a) Recognizing and Filtering Inconsistent Data

APT contends that the '916 patent is directed at rectifying an issue with conventional predictive analytics software, which did not adequately recognize and filter inconsistent data. The claimed invention, according to APT, solves this issue by automatically identifying and optimizing parameters that filter inconsistent data to provide a more accurate computer analysis of business initiative testing. Thus, the claimed invention allegedly increases the software's accuracy, improving software functionality.

As the court has already addressed, though APT asserts that the claimed invention improves software functionality, the invention is directed toward an abstract concept. Any alleged benefits achieved by the patent are not the result of improvements to software or computer functionality. Instead, they are benefits that flow from performing an abstract idea, the virtual testing process. *See BSG Tech*, 899 F.3d at 1287–88 ("These benefits, however, are not improvements to database functionality. Instead, they are benefits that flow from performing an abstract idea in conjunction with a well-known database structure."). The fact that benefits result from the performing of an abstract idea does not change the fact that the idea is abstract and thus patent ineligible.

b) Solving a "Big Data" Problem

Relatedly, APT asserts that the patent is a "technical solution aimed at solving a 'big data' problem of recognizing and filtering inconsistent data." The court again notes that this alleged benefit stems from an abstract concept, the virtual test process. Thus, the benefit merely flows from an abstract concept; it does not demonstrate the eligibility of the patent. *See BSG Tech*, 899 F.3d at 1287–88.

Further, the scope of the claim language far exceeds only situations involving "big data." Regardless of whether the specification discusses big data or provides examples of the '916 patent as a solution to issues centered on big data, "any reliance on the specification in the [Section] 101 analysis must always yield to the claim language." *ChargePoint*, 920 F.3d at 769. "[T]he specification cannot be used to import details from the specification if those details are not claimed." *Id.*

The '916 patent claims "do not contain any limitations that address [problems with "big data"]. *Intellectual Ventures*, 838 F.3d at 1316. To the contrary, the patent provides that the claimed invention is not at all limited in applicability based on dataset size. The claim language extends beyond the scope of solving issues specific to "big data," thus preempting more than just the technical solution to "big data" problems that APT alleges is articulated in the patent. That the specification suggests that this patent is directed to solving big data problems does not change the lack of such a limitation in the claim language. *See ChargePoint*, 920 F.3d at 769 ("Even a specification full of technical details about a physical invention may nonetheless conclude with claims that claim nothing more than the broad law or abstract idea underlying the claims, thus preempting all use of that law or idea."). Thus, an argument that the '916 patent provides only a technical solution aimed at solving "big data" problems is unavailing.

4) The '916 Patent Fails to Meet Step One of the *Alice* Analysis

Taken together, the specification and claim language demonstrate that this invention is directed to an abstract concept of optimizing parameter settings for business initiative testing and that it accomplishes this through the analysis of business locations' historical data, a process termed "performing virtual tests on virtual test sites." "[C]laims focused on 'collecting information, analyzing it, and displaying certain results of the collection and analysis' are directed

to an abstract idea." *SAP America, Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1167 (Fed. Cir. 2018) (quoting *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016)).

APT asserts that this patent is not directed to an abstract concept because it makes improvements to computer and software functionality. But the use of technical components to implement the patent, even if the technical components are not completely generic, does not make a concept patent-eligible if the components merely provide a technological environment in which the abstract concept can be performed. *See BSG Tech*, 899 F.3d at 1286–87. The patent discusses the technical components used to implement the invention in broad, functional terms, without providing any technical details. The technical components are merely intended to provide an environment for performance of the claimed invention; they are not the invention's focus.

Further, the patent's expansive language and lack of specific technical details demonstrate that any method of optimizing parameter settings falls within the scope of the claimed invention. It is results-oriented. "[W]hen a claim directed to an abstract idea 'contains no restriction on how the result is accomplished . . . [and] [t]he mechanism . . . is not described, although this is stated to be the essential innovation[,]' then the claim is not patent-eligible." *Intellectual Ventures*, 838 F.3d at 1316 (quoting *Internet Patents Corp.*, 790 F.3d at 1348). The '916 patent essentially preempts all methods of using data to determine the optimal parameters for business initiative tests. This is an overly broad subject matter.

Whether the '916 patent is directed to "optimizing parameter settings for business initiative tests" or to "performing virtual tests on virtual test sites," the patent is directed to an abstract concept. Thus, the patent fails to meet step one of the *Alice* analysis.

V. *Alice* Step Two

"At step two, if claims are directed to a patent-ineligible concept, '[the court] consider[s] the elements of each claim both individually and "as an ordered combination" to determine whether the additional elements "transform the nature of the claim" into a patent-eligible application.'" *BSG Tech*, 899 F.3d at 1289 (quoting *Alice*, 573 U.S. at 217).

The "inventive concept" must be "sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself." *Id.* at 1290 (quoting *Alice*, 573 U.S. at 218). "[A] claimed invention's use of the ineligible concept to which it is directed cannot supply the inventive concept that renders the invention 'significantly more' than that ineligible concept." *Id*. Thus, in order for the claim to be transformed into a patent eligible application, the idea must be an additional feature, separate and apart from the abstract idea. *Id.*

Once a concept that is "significantly more than a patent upon the [ineligible concept itself]" has been identified, the court must determine whether that concept is in fact inventive. *Id.* (quoting *Alice*, 573 U.S. at 218). "Claim limitations that recite 'conventional, routine and well understood applications in the art' are insufficient to 'supply an inventive concept.'" *Id.* (quoting *Ariosa Diagnostics, Inc. v. Sequenom, Inc*., 788 F.3d 1371, 1378 (Fed. Cir. 2015)).

The eligibility of a patent under Section 101 is a question of law. *ChargePoint*, 920 F.3d at 773. It may, however, involve underlying factual determinations. *Id.* In particular, the Federal Circuit has held that "whether a claim limitation or combination of limitations is well-understood, routine, and conventional is a factual question." *BSG Tech*, 899 F.3d at 1290.

A. Application of *Alice* Step Two to the '916 Patent

APT asserts that, even if the '916 patent is directed to an abstract concept, the patent includes inventive concepts that transform the claimed invention into an eligible patent application. In support of this contention, APT argues that "performing virtual tests on virtual test sites" is an

inventive concept. In addition, APT asserts that the claimed invention's ordered steps improve the efficiency and accuracy of business initiative testing software, thus constituting an inventive concept. Finally, APT asserts that there are at least factual disputes regarding whether the alleged inventive concepts are well-understood, routine, conventional data-gathering activities.

MarketDial, to the contrary, contends that nothing in the '916 patent constitutes an inventive concept. MarketDial notes that the alleged inventive concepts identified by APT are directed to the ineligible concept addressed in step one of the *Alice* inquiry. Further, MarketDial asserts that the patent articulates no new technology or mathematical concepts, and thus that the patent consists entirely of "well-understood, routine, and conventional" claim limitations.

Having reviewed the '916 patent, the court concludes that the alleged inventive concepts identified by APT do not transform the '916 patent into an eligible application. All of the concepts identified by APT are directed to the same abstract concept at issue under step one of the *Alice* inquiry. The court therefore need not address whether the patent consists of well-understood, routine, and conventional activities.

1) The Virtual Test Process Is Not an "Inventive Concept"

APT first asserts that the concept of "performing virtual tests on virtual test sites" is an inventive one. This concept, APT argues, allows users to quickly and efficiently obtain the optimal system parameters for business initiative testing. This represents an improvement over prior systems, which relied on intuition and lacked empirical evidence. In addition, APT argues that it improves computer functioning because "the computer has to be programmed to perform the inventive steps." Thus, APT asserts that the performance of virtual tests on virtual test sites is not a well-understood, routine, or conventional activity.

First, the court notes that the concept of performing virtual tests on virtual test sites is central to the concept addressed in the *Alice* step one inquiry. Thus, the court need not decide

whether the concept is unconventional and inventive, as it does not constitute an additional feature, separate and apart from the abstract concept of optimizing parameter settings for business test initiatives. *See ChargePoint*, 920 F.3d at 774 (concluding that multiple concepts alleged by the patent-holder were not "inventive concepts" as is required under *Alice* step two because they mirrored the abstract idea articulated in the *Alice* step one analysis). To the contrary, analyzing business locations' historical data to determine the optimal parameter settings is central to the court's earlier *Alice* step one inquiry.

In addition, the court has addressed the concept of "performing virtual tests on virtual test sites" and concluded that it is an abstract concept. Regardless of whether it is groundbreaking and unconventional, it therefore cannot form the "inventive concept" necessary to transform the patent into an eligible application. *SAP America*, 898 F.3d at 1163 ("We may assume that the techniques claimed are '[g]roundbreaking, innovative, or even brilliant,' but that is not enough for eligibility." (citation omitted)); *Intellectual Ventures*, 838 F.3d at 1315 ("[T]he 'novelty' of any element or steps in a process, or even of the process itself, is of *no relevance* in determining whether the subject matter of a claim falls within the § 101 categories of possibly patentable subject matter." (quoting *Diamond v. Diehr*, 450 U.S. 175, 188–89 (1981)). The virtual test process is "ineligible because [its] innovation is an innovation in ineligible subject matter." *SAP America*, 898 F.3d at 1163. It therefore cannot provide the inventive concept necessary to transform the '916 patent into an eligible application.

2) The Ordered Combination Is Not an "Inventive Concept"

APT also asserts that the claimed invention's ordered steps improve the efficiency and accuracy of business initiative testing software. For example, APT argues that the ordered combination of "performing … a virtual test on a set of virtual test sites… and wherein the virtual test is performed on the virtual test sites using a variation of each parameter setting," "determining

a noise value for the first parameter setting set," and "determining a set of optimal parameter settings" constitutes an inventive concept because it optimizes software functionality by reducing inconsistencies and increasing accuracy.

This alleged inventive concept, like the performance of virtual tests on virtual test sites, is nothing more than the implementation of the abstract concept discussed at step one of the *Alice* inquiry. Regardless of whether the ordered combination is inventive, it is not an additional component of the '916 patent. It is merely the implementation of the abstract concept of optimizing parameter settings for business initiative tests through data analysis, mirroring the concept discussed under *Alice* step one. Accepting as true the allegation that benefits flow from this ordered combination does not change the court's analysis. *See BSG Tech*, 899 F.3d at 1287–88.

3) No Factual Disputes Preclude Resolution at This Stage

Finally, APT contends that, accepting the factual allegations in the Complaint as true, there are at least factual disputes regarding whether the alleged "inventive concepts" are well-understood, routine, or conventional. The court disagrees. No such factual dispute prevents the court from concluding that the aforementioned concepts are not "inventive concepts" sufficient to transform the '916 patent into an eligible application.

While the unconventional nature of the concepts may be a factual dispute, the court need not address whether the aforementioned concepts are conventional, routine, or well-understood. As the court has noted, regardless of whether the virtual test process and the ordered steps are unconventional, they are not inventive concepts because they are not additional elements of the '916 patent. Neither constitutes anything more than the implementation of the abstract concept identified in step one of the *Alice* analysis. Thus, even accepting APT's factual allegations as true, these allegedly inventive concepts are not, as a matter of law, additional features of the '916 patent.

VI. The '916 Patent Does Not Survive the *Alice* Inquiry

The two-step *Alice* inquiry demonstrates that the '916 patent is not an eligible application under Section 101. The patent is directed to an abstract concept and no "inventive concept" transforms it into an eligible application. For the foregoing reasons, MarketDial's motion to dismiss Count III is granted. APT's third cause of action alleging patent infringement is dismissed.

TRADE SECRET MISAPPROPRIATION CLAIMS

MarketDial also moves to dismiss APT's first and second causes of action for trade secret misappropriation. APT brings its first cause of action for trade secret misappropriation under the Defend Trade Secrets Act ("DTSA"), 18 U.S.C. § 1836, *et seq.* APT brings its second cause of action for trade secret misappropriation under the Utah Uniform Trade Secrets Act ("UTSA"), UTAH CODE § 13-24-1, *et seq.*

APT alleges that Mr. Stoddard obtained trade secret information over the course of his employment with McKinsey. The information acquired allegedly consisted of PowerPoint presentations and case studies including an overview and technical details of APT's proprietary software, portions of the user interface architecture, and applications to potential clients.

MarketDial contends that APT has failed to sufficiently plead either claim. Because the elements of the causes of action are nearly identical and MarketDial's arguments apply to both claims, the court addresses these causes of action in tandem.

I. Trade Secret Misappropriation Under Utah and Federal Law

The DTSA provides that "[a]n owner of a trade secret that is misappropriated may bring a civil action under this subsection if the trade secret is related to a product or service used in, or intended for use in, interstate or foreign commerce." 18 U.S.C. § 1836(b)(1).

The DTSA defines "trade secret" to mean

> all forms and types of financial, business, scientific, technical, economic, or engineering information . . . if — (A) the owner thereof has taken reasonable measures to keep such information secret; and (B) the information derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable through proper means by, another person who can obtain economic value from the disclosure or use of the information.

18 U.S.C. § 1839(3). Further, the DTSA defines the term "misappropriation" to include, among other things, "disclosure or use of a trade secret of another without express or implied consent by a person who . . . used improper means," such as misrepresentation or a breach of a duty to maintain secrecy, "to acquire knowledge of the trade secret."[10] 18 U.S.C. §§ 1839(5)(B)(i), 6(a).

To establish a claim under the DTSA, the plaintiff must therefore show: "(1) the existence of a trade secret that relates to a product or service used in, or intended for use in, interstate or foreign commerce; (2) the acquisition of the trade secret, or the use or disclosure of the trade secret without consent; and (3) the person acquiring, using, or disclosing the trade secret knew or had reason to know that the trade secret was acquired by improper means." *DTC Energy Grp., Inc. v. Hirschfeld*, 420 F. Supp. 3d 1163, 1175 (D. Colo. 2019) (citation omitted).

The elements of a trade secret claim under the UTSA closely resemble those of a claim under the DTSA. Under the UTSA, a "trade secret" is defined as

> information, including a formula, pattern, compilation, program, device, method, technique, or process, that: (a) 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 (b) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.

[10] The DTSA also defines of "misappropriation" to include the use of a trade secret without consent by a person who, at the time of use, "knew or had reason to know that the knowledge of the trade secret was . . . derived from or through a person who had used improper means to acquire the trade secret" or who had a duty to maintain the secrecy of the trade secret. 18 U.S.C. § 1839(5)(B)(ii).

UTAH CODE § 13-24-2(4). The UTSA further defines "misappropriation" to include the "disclosure or use of a trade secret of another without express or implied consent by a person who . . . used improper means," such misrepresentation or breach of a duty to maintain secrecy, "to acquire knowledge of the trade secret." UTAH CODE §§ 13-24-2(1), (2)(b).[11]

Thus, "[t]o establish a claim for misappropriation of trade secrets [under the UTSA], [the plaintiff] must show (1) the existence of a trade secret, (2) communication of the trade secret to [the defendant] under an express or implied agreement limiting disclosure of the secret, and (3) [the defendant's] use of the secret that injures [the plaintiff]." *Water & Energy Sys. Tech, Inc. v. Keil*, 974 P.2d 821, 822 (Utah 1999); *see also USA Power, LLC v. PacifiCorp*, 372 P.3d 629, 648 (Utah 2016).

II. Application to APT's Trade Secret Misappropriation Claims

MarketDial asserts that APT failed to allege that it maintained the secrecy of the material at issue. In addition, MarketDial argues that APT did not plead that the secrecy of the material at issue had independent economic value. The court addresses each argument in turn and concludes that both are meritless. MarketDial's motion to dismiss Counts I and II is therefore denied.

A. Reasonable Efforts to Maintain the Information's Secrecy

APT sufficiently pleaded that it took steps to maintain the secrecy of the information at issue. In its motion to dismiss, however, MarketDial contends that the information was publicly disclosed in the '916 patent and that it therefore is not secret. In addition, MarketDial argues that

[11] Like the DTSA, the UTSA also defines "misappropriation" to include the "disclosure or use of a trade secret of another without express or implied consent by a person who . . . at the time of disclosure or use, knew or had reason to know that his knowledge of the trade secret" was derived through a person who had utilized improper means to acquire it or was derived through a person who owed a duty to the person seeking relief to maintain its secrecy or limit its use. UTAH CODE § 13-24-2(2)(b)(ii).

APT failed to allege facts to show that the marketing and business development information provided to Mr. Stoddard extended beyond the type of material typically presented to potential customers without the benefit of an NDA. These arguments are unavailing.[12]

1) Disclosures in the '916 Patent

MarketDial first argues that the information allegedly misappropriated by Mr. Stoddard was disclosed in the '916 patent and therefore was not kept secret. In particular, MarketDial notes that the allegedly misappropriated information included an overview and technical details of the software, applications to potential clients, and confidential portions of the user interface. This type of information, MarketDial asserts, is the exact sort of information disclosed in the '916 patent. APT, to the contrary, represents that the trade secrets go beyond what is disclosed in the patent and that the '916 patent therefore does not destroy the secrecy of the information at issue.

Public disclosures made in a patent application are not secret and thus cannot be the subject of a trade secret misappropriation claim. In its Complaint, however, APT repeatedly alleges that the trade secret information underlying is claims is different from the information disclosed in the '916 patent. In contending that the type of information allegedly misappropriated by Mr. Stoddard

[12] As APT points out, MarketDial does not go so far in its briefing as to suggest that APT has not pleaded the trade secret information with enough particularity. At oral argument, however, MarketDial raised the particularity issue. Courts have recognized the appropriateness of pleading trade secrets in general terms in order to avoid publicly disclosing the allegedly secret information in court filings. *See ATS Grp., LLC v. Legacy Tank & Indus. Servs. LLC*, 407 F. Supp. 3d 1186, 1197–1200 (W.D. Okla. 2019); *Dardashtian v. Gitman*, No. 17 CIV. 4327 (LLS), 2017 WL 6398718, at *5 (S.D.N.Y. Nov. 28, 2017); *Wells Lamont Indus. Grp. LLC v. Richard Mendoza & Radians, Inc.*, No. 17 C 1136, 2017 WL 3235682, at *3 (N.D. Ill. July 31, 2017). Further, Utah's trade secret misappropriation statute does not impose a heightened pleading standard on claims brought under the statute, *USA Power, LLC v. PacifiCorp*, 372 P.3d 629, 649 (Utah 2016), and MarketDial has pointed to no authority suggesting that the court should read a heightened pleading standard into the DTSA. The allegations laid out in paragraph 89 of the Complaint are sufficiently specific to provide MarketDial with notice regarding the claims brought against it.

is the same as the type of information disclosed in the '916, MarketDial has merely raised a factual dispute.

Taking APT's factual allegations as true, as the court is obligated to do at this stage, the information underlying APT's trade secret misappropriation claims consists of applications, techniques, and business methods developed by APT and separate from the information disclosed in the '916 patent. MarketDial's argument thus does not warrant dismissal of the trade secret misappropriation claims.

2) Alleged Failure to Plead Facts Supporting Secrecy of the Information

In addition, MarketDial asserts that APT failed to allege that it maintained the secrecy of the information provided to Mr. Stoddard. In particular, APT allegedly failed to assert that the information provided to Mr. Stoddard was not also disclosed to potential customers without the benefit of an NDA. MarketDial also argues that the allegedly disclosed information consisted of nothing more than "high-level details" provided to customers, such as "key elements" and the software's "application to the financial services industry." MarketDial's arguments are not compelling. APT has sufficiently pleaded facts to suggest that it took steps to maintain the secrecy of the information disclosed to Mr. Stoddard.

In its Complaint, APT expressly alleges that the confidential information at issue was shared with Mr. Stoddard under a confidentiality agreement. In particular, APT alleges that McKinsey agreed that it and its employees would use APT's confidential information only for purposes within the scope of the parties' confidentiality agreement and that the confidential information would not be disclosed to anyone other than McKinsey employees with a need to know who were bound by the agreement. APT also alleges that Mr. Stoddard was bound by the confidentiality agreement and that he "requested and obtained large amounts of APT's confidential and trade secret information pursuant to the Confidentiality Agreement." APT further alleges

specific incidents of information sharing, noting, for example, than Mr. Stoddard requested and was provided with a case study containing APT trade secret information in June of 2015 and that he did so in acknowledgement of his and McKinsey's obligation to keep the information secret.

APT also alleges that it employed means in addition to the confidentiality agreement to protect the information at issue. For example, APT alleges that it "requires its employees to enter into non-disclosure and confidentiality agreements to protect its confidential information and trade secrets;" "keeps its proprietary information on secure servers, protected by access controls, and requires encryption for proprietary information on employees' computers;" "has restricted access to visitors and third parties at its offices and facilities;" and "provides training to its employees on the proper handling of APT proprietary and trade secret information."

MarketDial provides a wide range of hypothetical allegations that APT does not make and contends that, as a result, APT has not pleaded the secrecy element of a trade secret misappropriation claim. For example, MarketDial notes that APT did not allege that either customers, employees, or potential customers are bound by confidentiality agreements. But, as the court has already noted, APT's Complaint alleges extensive facts regarding its attempts to prevent the dissemination of the information at issue. MarketDial's hypothetical factual allegations do not change the sufficiency of APT's actual factual allegations.[13] Taking APT's factual allegations as true and viewing them in the light most favorable to APT, APT made reasonable efforts and took

[13] In support of its position, MarketDial also relies on *Raben Tire Co., LLC v. McFarland*, No. 5:16-CV-141, 2017 WL 741569, at *2 (W.D. Ky. Feb. 24, 2017), a case in which the plaintiff failed to allege any facts regarding its protection of the information in question from dissemination. In addition to not binding this court, the *Raben Tire* court's rationale is inapplicable here. The court in *Raben Tire* noted that "[t]here [was] no suggestion, for example, that either [of the defendants] were restricted from sharing that information due to a nondisclosure agreement." *Id.* That is not the case here.

reasonable measures to maintain the secrecy of the trade secret information. This argument therefore does not warrant dismissal of the trade secret misappropriation claims.

B. Independent Economic Value of the Information's Secrecy

APT has also pleaded sufficient facts to support the contention that the information has independent economic value from not being generally known as is required under the DTSA and UTSA. MarketDial does not dispute that APT has alleged facts to suggest that it possesses information whose secrecy has independent economic value. Rather, MarketDial argues that APT has failed to tie its independent economic value arguments to the information allegedly disclosed to Mr. Stoddard. The court finds this argument unpersuasive.

To demonstrate the independent economic value of the information's secrecy, APT alleges that it has invested nineteen years and tens of millions of dollars into developing its trade secrets, including its software system, client-specific strategies incorporating APT's software, and other trade secrets. In addition, APT asserts that it has won widespread recognition and achieved commercial success from the use of its trade secrets. Neither party disputes that these allegations are sufficient to demonstrate that the information about which they are made has independent economic value from not being generally known. Instead, the parties dispute whether APT has alleged these facts with respect to the information provided to Mr. Stoddard.

1) APT's Financial Investment

To demonstrate the independent economic value of the secret information at issue, APT asserts that it invested significant time and money into the information. MarketDial asserts that APT's investment allegations relate not to the information disclosed to Mr. Stoddard, but instead to other information discussed in APT's Complaint.

The information allegedly disclosed to Mr. Stoddard includes "key features of the functionality of APT's products and services into MarketDial's products and services;"

"proprietary and confidential technical information, knowledge, and business strategy;" "business plans and business strategies surrounding its [software] systems and APT's customers;" "an overview and technical details of APT's Test & Learn® software, as well as identification of APT's confidential clients;" "[the software's] application to the financial services industry and an identification of the key elements of this process with corresponding illustrations;" and "several pictures that disclosed confidential portions of the user interface architecture of the APT software." APT alleges that it devoted "a great deal of time and expense" in developing this information. APT further asserts that Mr. Stoddard and MarketDial's actions "will cause APT to lose the benefit of its trade secrets and legitimate competitive advantage it has earned through its 'substantial investment in such trade secrets.'"

MarketDial, however, contends that the monetary investment asserted "relate[s] to the general categories of information set forth in [paragraph] 89 [of the Complaint], and not the information allegedly provided to Defendants." Further, MarketDial notes that APT never disclosed the software code to Mr. Stoddard.

The court concludes that MarketDial raises, at most, a factual dispute. APT expressly alleges that the information it conveyed to Mr. Stoddard was information discussed in paragraph 89 of the Complaint, asserting that "[t]he trade secrets that MarketDial and Stoddard misappropriated from APT include those listed in paragraph 89." And the trade secret information discussed in paragraph 89 mirrors the information that was allegedly conveyed to Mr. Stoddard. The description of the trade secrets in paragraph 89 includes, among other things, "confidential methods that determine specific characteristics that are used to select a set of test locations or markets that will enhance the accuracy of testing," "confidential business strategies and testing methods unique to certain clients or certain industries," "trade secrets that are used in its software

to identify specific criteria to be assessed to reduce inaccuracies in the testing of business initiatives," and "a set of particular confidential user interfaces (UIs) and architecture that provide simplified reporting of results for customers." The information allegedly conveyed to Mr. Stoddard similarly consisted of secret information about the software's user interface and architecture, an overview and technical details of the software, and business strategies unique to certain clients and industries.

MarketDial's argument that APT has failed to sufficiently tie the investment with the disclosed information is unpersuasive. Accepting APT's factual allegations as true and viewing them in the light most favorable to APT, the information disclosed to Mr. Stoddard is the same information in which APT invested significantly.

2) Commercial Success Attributable to the Trade Secret

To further demonstrate the information's independent economic value, APT asserts that it has attained widespread recognition and commercial success from the use of its trade secrets. In its Complaint, APT alleges that, as a result of its trade secrets, it has "won numerous awards for its technological achievements," that it "has achieved substantial business success . . . the value of which was demonstrated by the acquisition of APT in 2015 by MasterCard for a total of $600 million," and that "sensitive, confidential, and proprietary information and trade secrets form the backbone of APT's success in its business."

MarketDial does not dispute that these allegations suggest the independent economic value of the information about which they are made. Instead, MarketDial argues that these allegations are not tied to the information purportedly disclosed to Mr. Stoddard.

MarketDial asserts that APT's own allegations demonstrate that it owns trade secrets and other intellectual property far beyond what it allegedly disclosed to Mr. Stoddard. As a result, MarketDial argues that the commercial success allegations relate both to the information disclosed

to Mr. Stoddard and to additional secret information. Thus, MarketDial concludes, the information disclosed to Mr. Stoddard does not have *independent* economic value because the alleged economic value of the information is "derived from a mixture of other information never disclosed to Mr. Stoddard."

As was the case with respect to the investment argument, MarketDial's contention does not warrant dismissal of APT's trade secret misappropriation claims. Viewing the factual allegations as true and in the light most favorable to APT, the factual allegations in paragraph 89 of the Complaint are intended to describe the information disclosed to Mr. Stoddard. Thus, MarketDial has again identified a factual dispute.

APT has alleged facts to support the contention that the information disclosed to Mr. Stoddard is the source of its economic success. Perhaps, at a later stage of the litigation, it will become clear that the disclosed information lacks independent economic value, and that APT's commercial success instead results from a mixture of information never disclosed to Mr. Stoddard. At this stage of the dispute, however, dismissal for a failure to plead the independent economic value element would be improper.

C. Remaining Elements of the Trade Secret Misappropriation Claims

In its briefing, MarketDial does not dispute the sufficiency of APT's pleadings with respect to the other elements of its trade secret misappropriation claims. At oral argument, however, MarketDial asserted that APT failed to plead that MarketDial and Mr. Stoddard used the allegedly misappropriated information. APT clearly asserts the use of the trade secrets in its Complaint, which provides, among other things, that they "have used APT's trade secrets to compete with APT," "have incorporated APT's confidential information and trade secrets into MarketDial's products and services," and "inevitably would have used such information in developing their own

competing products." Contrary to MarketDial's assertion at oral argument, APT sufficiently pleaded that MarketDial and Mr. Stoddard used the information.

Upon review of the Complaint, the court does not identify any other pleading insufficiencies with respect to APT's causes of actions under the DTSA or UTSA. MarketDial's motion to dismiss Counts I and II is therefore denied. APT's trade secret misappropriation claims survive at this stage of the litigation.

UNFAIR COMPETITION CLAIM

APT brings its fourth cause of action under the Utah Unfair Competition Act ("UUCA"), UTAH CODE § 13-5a-101 *et seq.*, alleging that the defendants' unlawful, unfair, and fraudulent acts, including their alleged trade secret misappropriation and patent infringement, form the basis of this cause of action. APT has failed to allege facts sufficient to support a claim under the UUCA. The fourth cause of action is therefore dismissed.

The UUCA provides "a person injured by unfair competition may bring a private cause of action against a person who engages in unfair competition." UTAH CODE § 13-5a-103. The statute defines "unfair competition" to mean an intentional business act or practice that

> (i)(A) is unlawful, unfair, or fraudulent; and (B) leads to a material diminution in value of intellectual property; and (ii) is one of the following: (A) malicious cyber activity; (B) infringement of a patent, trademark, or trade name; (C) a software license violation; or (D) predatory hiring practices.

UTAH CODE § 13-5a-102(4)(a). Relevant to the parties' dispute is subsection (ii) of this provision, which requires that the underlying intentional business act or practice be malicious cyber activity, the infringement of a patent, trademark, or trade name, a software license violation, or predatory hiring practices.

MarketDial contends that if APT's patent infringement cause of action and trade secret misappropriation claims are dismissed, APT has failed to allege any of the actions on this list. In

addition, MarketDial notes that trade secret misappropriation is not listed within the definition of "unfair competition" and contends that federal patent law preempts a UUCA cause of action for patent infringement. APT, on the other hand, asserts that it has alleged "unfair competition" within the definition of the UUCA as it has alleged patent infringement plus an "additional element," transforming this count from a strict liability patent infringement claim to a valid UUCA cause of action.

The court finds that APT has failed to plead a valid UUCA claim. First, while APT suggests in its Complaint that trade secret misappropriation forms the basis of its UUCA cause of action, it does not make this argument in its briefing. The court also notes that the statute's definition of "unfair competition" does not include trade secret misappropriation. In addition, the Utah Trade Secret Act expressly displaces other state remedies for trade secret misappropriation. UTAH CODE § 13-24-8 (displacing conflicting tort, restitutionary, and Utah state laws providing civil remedies for misappropriation of a trade secret, except for contractual remedies, other civil remedies that are not based upon misappropriation of a trade secret, and criminal remedies). Trade secret misappropriation therefore cannot alone form the basis of APT's UUCA cause of action. Second, as the court has discussed at length, APT has failed to plead a patent infringement claim. Thus, patent infringement cannot form the basis of APT's UUCA claim.

At oral argument, APT conceded that patent infringement was the sole basis for its UUCA claim, as it does not allege malicious cyber activity, a software license violation, or predatory hiring practices. Because the court has dismissed APT's claim of patent infringement, APT has failed to plead a claim under the UUCA. APT's fourth cause of action is therefore dismissed.

CONCLUSION AND ORDER

For the foregoing reasons, MarketDial's Motion to Dismiss (ECF No. 104) is GRANTED IN PART and DENIED IN PART as follows:

1. MarketDial's motion to dismiss APT's first and second causes of action for trade secret misappropriation is DENIED.
2. MarketDial's motion to dismiss APT's third cause of action for patent infringement is GRANTED.
3. MarketDial's motion to dismiss APT's fourth cause of action for unfair competition is GRANTED.

Signed November 25, 2020

BY THE COURT

Jill N. Parrish
United States District Court Judge