UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

TNS MEDIA RESEARCH LLC (d/b/a KANTAR MEDIA AUDIENCES) and CAVENDISH SQUARE HOLDINGS, B.V.,	:	
Plaintiffs,	:	
-v-	:	
TIVO RESEARCH AND ANALYTICS, INC. (d/b/a TRA, INC.),	:	11-cv-4039 (KBF)
Defendant.	:	OPINION & ORDER
TIVO RESEARCH AND ANALYTICS, INC. (d/b/a TRA, INC.),	:	
Counterclaim-Plaintiff,	:	
-v-	:	
TNS MEDIA RESEARCH LLC (d/b/a KANTAR MEDIA AUDIENCES) and CAVENDISH SQUARE HOLDINGS, B.V.; WPP PLC; WPP GROUP USA, INC.; KANTAR GROUP LTD; KANTAR RETAIL AMERICA, INC.,	:	
Counterclaim-Defendants.	:	

KATHERINE B. FORREST, District Judge:

On February 22, 2016, the judge then presiding over this action, the Honorable Shira A. Scheindlin, issued an order dismissing all of the patent claims asserted by TiVo Research and Analytics, Inc. ("TRA"). Judge Scheindlin's ruling was a reasoned attempt to follow what was, at the time, somewhat confused law regarding the proper interpretation of patents in light of the U.S. Supreme Court's

decision in Alice Corp. Pty. Ltd. v. CLS Bank International ("Alice"), 134 S. Ct. 2347 (2014). TNS Media Research, LLC v. TiVo Research & Analytics, Inc., 166 F. Supp. 3d 432 (S.D.N.Y. 2016), (ECF No. 226.) Since that time, there have been a number of additional opinions issued by the Federal Circuit which have further clarified how district courts should apply Alice.

Due to Judge Scheindlin's retirement from the bench, this case was reassigned to the undersigned on May 10, 2016. This Court determined that the development of further clarity in the law, and the interpretation of the patents against such law, may support vacatur of the February 22 decision. The Court invited briefing on that issue. (ECF No. 270.) Now, having reviewed the entirety of the Federal Circuit's case law construing Alice, and having carefully parsed the claims in the relevant patents, this Court is convinced that justice in fact requires vacatur. Accordingly, the February 22, 2016 Opinion & Order is VACATED. TRA's patent claims are reinstated.

I. PROCEDURAL BACKGROUND

This case originally commenced, as so many patent cases do, as an action seeking a declaratory judgment of non-infringement. (ECF No. 1.) That claim was originally asserted on June 15, 2011, in a short, three-page complaint filed by TNS Media Research, LLC d/b/a Kantar Media Audiences ("Kantar") and Cavendish Square Holding B.V. (collectively, "plaintiffs"). Plaintiffs sought a declaration as to a single patent, U.S. Patent No. 7,729,940 (filed Apr. 14, 2008) ("'940 Patent"). (ECF No. 1.) On July 5, 2011, TRA answered and counterclaimed for infringement. (ECF No. 10.)

Over the course of the next year, TRA received two additional patents on the same general area: U.S. Patent No. 8,000,993 (issued August 16, 2011) ("'993 Patent") and U.S. Patent No. 8,112,301 (issued February 7, 2012) ("'301 Patent"). (Attached as Exhibits 1 and 2, ECF Nos. 75-2, 75-3, & 75-4.) On June 6, 2012, TRA filed an amended answer with counterclaims, adding infringement claims with regard to the '993 and the '301 patents. (ECF No. 75.)[1]

This case had a modestly tortured history thereafter. In 2013, Judge Scheindlin granted a motion by plaintiffs-counterclaim-defendants for summary judgement that included, inter alia, judgment on the infringement claims in their favor. An appeal of that decision followed, and on September 16, 2015, the Court of Appeals for the Federal Circuit vacated that portion of the ruling. TNS Media Research. LLC v. TiVo Research. & Analytics, Inc., 616 F. App'x 916, 920 (Fed. Cir. Sept. 16, 2015), (ECF No. 217.)

In the meantime, in 2014 the Supreme Court decided Alice—and the floodgates opened to what are now referred to as "Alice motions" by alleged or potential infringers seeking determinations of ineligibility under 35 U.S.C. § 101. The flood reached the steps of this courthouse, and on December 28, 2015, plaintiffs moved for summary judgment on the basis of patent ineligibility.[2]

[1] While the counterclaims initially asserted infringement as to a number of claims, those claims have been narrowed. At present, this Court understands that TRA continues to assert infringement of claim 71 of the '940 Patent; claims 1, 2, 3, 7, 8, and 9 of the '993 Patent; and claims 1, 23, 42, 47, 49, 63, 108, and 109 of the '301 Patent.

[2] That motion was added as a supplemental basis for judgment to an already pending second motion for summary judgment by plaintiffs-counterclaim-defendants. (See ECF No. 219.)

On February 22, 2016, Judge Scheindlin issued the opinion that is the subject of the motion now before this Court (the "February 22, 2016 Opinion"). On June 24, 2016, this Court issued an order stating that, in the interests of justice, it would reconsider the February 22, 2016 Opinion on patent eligibility. (ECF No. 270.)

II. THE INVENTION AT ISSUE

The February 22, 2016 Opinion recites a number of claims at issue in the underlying lawsuit, but analyzes only claim 71 of the '940 Patent. Resolution of this motion therefore turns on an understanding of the invention set forth in that claim. In connection with this review, the Court looks both to the language of the claim as well as the language of the specification. See Amdocs (Israel) Ltd. v. Openet Telecom, Inc., ___ F.3d ___, 2016 WL 6440387 at *9 (Fed. Cir. Nov. 1, 2016) ("In addition to taking into consideration the approved claim constructions, we examine the claims in light of the written description.") (citing Enfish, LLC v. Microsoft Corp., 822 F.3d 1327, 1335 (Fed. Cir. 2016) (explaining that applying Alice step one involves considering the claims "in light of the specification")); In re TLI Commc'ns LLC Patent Litig., 823 F.3d 607, 611-15 (Fed. Cir. 2016) (examining patent claims under Alice steps one and two in light of the written description). This Court first summarizes the invention in a non-technical manner, and then sets forth the particular language in the patent supportive of that description.

A. Brief Summary of the Invention

The specification and claim 71 indicate that the '940 Patent, issued in 2010, is directed at what remains a "hot" issue in advertising: how to measure the effectiveness of advertising in a fragmented digital environment. In particular, and

as described in more detail below, the invention is a method of gathering, storing, and analyzing data relating to media consumption (such as television programming) where a viewer[3] would be exposed to advertising, and combining that with that same viewer's product-purchasing data (such data might, for instance, be extracted from a loyalty card or credit card), as well as demographic data (for example, census data). After voluminous data is gathered, it is stored, processed, and used to calculate a return on investment or other target metric for advertising. In sum, the method described in the invention would enable an advertiser to know whether showing a commercial regarding product "x" correlates with a subsequent purchase of product "x" by some, all, or any of the viewers of a particular commercial shown in a particular medium at a particular time. To address the obvious privacy concerns involved at many stages of this process (including knowing what specific viewers are watching and what they are buying), a "double-blind" matching process is built in. That process is not itself the invention claimed—it is a step in the invention intended to address privacy concerns.

B. Full Description of the Invention Based on the Language of the Patent

The '940 Patent is entitled "Analyzing Return on Investment of Advertising Campaigns by Matching Multiple Data Sources." ('940 Patent, ECF No. 75-1 at 2.) The Abstract of the invention describes it as follows:

> [S]trategies, tools and techniques are provided for processing and analyzing data in an advertising measurement system accessible through a software-as-service model or a client-downloaded computer program. The system may be configured to receive and process

[3] For ease of reference, a "viewer" and a "household" are used interchangeably.

> household media exposure data, product purchase data, advertising data, program data, and demographic data, wherein the data may be obtained from various sources, including from a program delivery source (e.g., a television set-top box) located in a household of a consumer. The data may be used to optimize media placement generally or to address advertising content to specific households. Methods for storing data in the advertising measurement system by distributing the data across multiple shards are also provided. In addition, methods for protecting privacy of communicated data are disclosed.

('940 Patent at [57].) The invention addresses a specific commercial issue: creating a method to allow for accountability regarding the financial resources spent on advertising. ('940 Patent 1:17-18.) In other words, it addresses the challenge of measuring the "bang for the buck" an advertiser obtains from its advertising spend. The method seeks to address the issue of "accurately measuring each of the media in which a product is advertised to determine each medium's relative contribution to ROI with respect to advertisement expense." ('940 Patent 1:25-27.) In addition, the method seeks to address the need to measure advertising effectiveness in millions of households across an array of different television channels and program offerings. ('940 Patent 1:32-36.) The specification notes that the problem of effective measurement has been exacerbated by the "fragmentation of television programming options available to consumers through digital cable channels, video-on-demand (VOD), digital video recorder (DVR), interactive television (iTV), and other programming options." ('940 Patent 1:36-40.) The specification further notes that this variety of offerings has caused advertisers to "question the adequacy of current media accountability methodologies." ('940 Patent 1:40-42.)

The method described in the invention is specifically directed at the issues surrounding measuring a large sample size of consumer households. It notes that "[a] large sample is needed because the number of channels has become so great that the ratings for the channels themselves and especially the breakdowns of the audiences of specific programs by demographic groups typically become unstable and unreliable with smaller sample sizes employed with prior analysis methods." ('940 Patent 1:45-50.) This, in turn, means that "the sample size must be sufficiently large to facilitate the dissection of the results by exposure to media and marketing communications." ('940 Patent 1:51-53.) For a typical brand, this might mean that a sample of "hundreds of thousands of households" may be required. ('940 Patent 1:54-56.)

The specification notes that privacy concerns arise in connection with gathering and analyzing data associated with advertising effectiveness. ('940 Patent 2:5-7.) The specification notes that the collection and analysis of data must take this into consideration. ('940 Patent 2:10-13.)

The Description of the invention describes a method to allow "users to measure the sales effects of advertising, among various return on investment metrics, while utilizing household-level data . . . as opposed to market-level averages[.]" ('940 Patent 3:46-49.) Embodiments can be implemented without the need to install or employ "supplemental data collection devices" (such as "people meters," bar code scanning devices, or other equipment). ('940 Patent 3:54-57.) The

specification describes that in various embodiments the invention provides for advertising measurement where there is an ability:

> to cross-correlate advertising audience data collected via television distribution systems from television digital set-top boxes . . . and other program delivery sources (e.g., Internet, radio, mobile devices and others) in multiple households, with television program data, with other market or media touchpoints (e.g., print, outdoor, web pages, radio) and with product purchase data derived from those same households, so that the purchase of a product or service can be reviewed with regard to the stimuli that occurred prior to that purchase to the household making that purchase.

('940 Patent 4:4-15.) In addition, the analyses that result from implementation of the method can be both at an individual or household level. Data is collected from a "clickstream," defined in the patent as, inter alia, "time-stamped minute/second record of media exposure events (e.g., channel changes, volume changes, start, stop, pause, etc.) generated by media or program delivery sources a consumer controls with buttons or keys, such as a television, (DVR), Internet, or wireless devices (e.g., mobile phones)[.]" ('940 Patent 4:30-36.) Various embodiments of the invention measure other advertising effectiveness by way of the Internet or DVR-type devices. ('940 Patent 4:44-50.)

The method disclosed in the invention allows advertisers to access advertising measurement with associated calculations, metrics, and data processing on a real-time basis. ('940 Patent 4:51-54.) "This can facilitate reallocation of advertising resources, perhaps shifting money from advertising with lower sales per

dollar to advertising producing higher sales per dollar, thereby increasing the ROI . . . ." ('940 Patent 4:56-59.)

The specification notes that the inventors "have discovered, however, that it is often insufficient to use the raw viewing data generated by the [digital set-top boxes]. Embodiments of the invention therefore can be configured to apply one or more cleansing or editing algorithms to the viewing data to remove inconsistencies and account for potential limitations of the [data collection software]." ('940 Patent 5:37-43.)

The specification further notes that the invention addresses the economic challenge of "measuring television exposure for a relatively large sample size of households" and to correlate that same population with purchasing behavior. ('940 Patent 5:61-66.) Moreover, in various embodiments, "the invention addresses problems with prior market analysis approaches by making data collection cost effective for a variety of media and marketing communication channels at the household level with enhanced precision and within comparatively larger household sample sizes." ('940 Patent 6:48-53.)

The specification describes the types of analyses that may be created as including tools to allow advertisers to run multivariate regression analyses and marketing-mix modeling. ('940 Patent 14:13-16.) For instance, the method would allow for analysis of "granular and attribute encoded observations of ad exposure and purchase events within specific households." ('940 Patent 14:18-19.) "Such analyses can facilitate the allocation of weights to certain components or variables

for generating predictive estimates." ('940 Patent 14:21-24.) Put another way, having all this data together in one place at the same time allows for a type of granular analysis of virtually any characteristic that an advertiser wants to examine in relation to both media exposure and purchasing behavior.

There are four dozen figures included in the specification. Those figures illustrate, inter alia, the steps involved in the invention (see, e.g., '940 Patent fig. 7), how data can be collected and stored (see, e.g., '940 Patent figs. 8-21), and reports that can be generated (see, e.g., '940 Patent fig. 37A-40B).

The specification sets forth several algorithms that can be used to implement the method. The algorithms allow for metric measurements in a variety of forms and formats. For instance, to examine how long an audience member tuned in to an advertisement, it posits a rating as defined by a formula; that formula can be examined at a household level per advertisement on the basis of a per-second or per-minute average. ('940 Patent 28:14-32.) In addition, a cost per minute or "CPM" measurement may be calculated using a formula that includes variables for the number of households, the number of instances of programs viewed during a selected time period, a comparison of expected impressions (viewings) to actual impressions, etc. ('940 Patent 28:46-66.) Additional CPM algorithms are also provided in each of the columns 29 through 37.

Claims 1 and 71 are quite similar with a difference in the final step: Claim 1 provides for a method to calculate an ROI specifically, and claim 71 provides for a

method that calculates "one true target index metric." (Compare '940 Patent 40:45-46, with '940 Patent 48:7-8.)

Having explained how the specification describes the invention intended, the Court now recites Claim 71—the claim at issue on this motion—in full:

> Claim 71 states as follows:
>
> A computer implemented method for facilitating analysis of consumer behavior in association with advertising exposure or program delivery, the method comprising:
>
> collecting in an advertising measurement system:
>
> (i) clickstream data from a program delivery source of a consumer, wherein collecting the clickstream data is not dependent on a supplemental data collection device, and also wherein the collected clickstream data includes household level data associated with multiple consumer households;
>
> (ii) advertising data associated with delivery of the program by the program delivery source, wherein collecting the advertising data is not dependent on a supplemental data collection device, and also wherein the collected advertising data includes household level data associated with multiple consumer households;
>
> (iii) program data associated with the program delivered on the program delivery source, wherein collecting the program data is not dependent on a supplemental data collection device, and also wherein the collected program data includes household level data associated with multiple consumer households; and,
>
> (iv) purchase data from a purchase data source, wherein collecting the purchase data is not dependent on a supplemental data collection device, and also wherein the collected purchase data includes household level data associated with multiple consumer households;
>
> matching at least portions of the collected advertising data, the collected clickstream data, the collected purchase data, and the collected program data in the advertising measurement system at a

household data level with a centrally located electronic computer processor configured for centrally processing data received from the program delivery source, the advertising data source, the program data source, and the purchase data source, wherein the matching further includes:

> (i) grouping the collected data in association with an account identifier of each consumer household without processing any personally identifiable information associated with the consumer household, and
>
> (ii) matching each account identifier associated with each consumer household with other account identifiers associated with the same consumer household without processing any personally identifiable information associated with the consumer household;

storing the matched advertising data, clickstream data, purchase data, and program data in at least one centrally located electronic data storage medium operatively associated with the computer processor;

applying at least one cleansing and editing algorithm to the matched and stored data; and,

calculating at least one true target index metric based on the matched and stored data.

('940 Patent 46:33-48:9.) Based on this language, claim 71 comprises the following required steps:

Step 1: Data collection

a. Collection of clickstream data;

b. Collection of advertising data;

c. Collection of program data; and

d. Collection of purchase data.

Step 2: A matching step: requiring matching at least portions of these data categories at a household level through a centrally located

electronic computer processor configured for processing such data; such matching includes

a. Grouping the collected data with an account identifier for the household without processing any personally identifiable information; and

b. Matching that data with an account identifier with the clickstream data, purchasing data, and programming data in one centrally located electronic data storage medium.

Step 3: A cleansing and editing step: using an algorithm; and

Step 4: A calculation step: to calculate one true target index metric.

Many of these steps contain additional limitations. For instance, the first set of data described is "clickstream" data from a program-delivery source. This is the basic viewing data mentioned earlier in the patent. However, while the claim recites that the clickstream data "is not dependent on a supplemental data collection device" (that is, there need not be a separate box attached to the television to gather the data), it must include "household level" data associated with "multiple consumer households." ('940 Patent 46:37-42.) Each step of the claim must be parsed for its individual limitations.

But perhaps most importantly for this motion, the variety and volume of data, the ability to match it by household with associated purchasing data, potentially in real time, must be done with a computer. In other words, use of a computer is not a convenience or efficiency—it is a requirement for each of the

steps. Without a process for central storage, neither the matching step[4] nor the cleansing and editing steps could occur; and without that central storage and processing capability at a very granular level, the calculations called for could not be performed.

III. THE FEBRUARY 22, 2016 OPINION

In the February 22, 2016 Opinion, the Court interpreted claim 71 of the '940 Patent as a "claim [] for the digital, double-blind matching of collected purchase data and program delivery data to individual households." TNS Media Research, 166 F. Supp. 3d at 448. The Court found this was an abstract idea under step one of the Alice test (described further below). Id. at 448-49. The Court found that the patent used data that "could just as easily be found entirely on the Internet," giving the example of an online retailer and delivery data coming from a video streaming service. Id. at 449 & n.67. For this reason, the Court found that "[n]o tangible machine is needed to collect the data required for the double-blind match." Id. at 449. The Court described the claim as constituting an "abstract concept of matching consumer data to households using a double-blind matching strategy[.]" Id. The Court stated that the abstract nature of the patent was confirmed by the fact that the claim, as a whole, could be performed by "humans rather than computers." Id. The Court's decision was also grounded in her understanding of various courts' interpretations of Alice. Id. at 445-46 & nn.39-49.

[4] For instance, viewing and purchasing likely occur at different points in time; storage allows for the necessary ex post matching. However in the world of Internet purchasing, matching might nonetheless occur rather quickly.

The Court then turned to the second step of Alice: inventiveness. She found that the invention failed this step, as well. She found that the claim only recited well understood or conventional data collection, data storage, and "post-solution" activities (which she described as "activities performed on the data following the double-blind match"). 166 F. Supp. 3d at 450. She summarized the claim limitations as doing "little more than implement[ing] the core concept of TRA's claims—the digital double-blind match of household data." Id. She determined that the claim did not purport to "effect an improvement in any other technology or field." Id. (citing Mortgage Grader, Inc. v. First Choice Loan Servs. Inc., 811 F.3d 1314, 1325 (Fed. Cir. 2016)).

IV. LEGAL PRINCIPLES

A. Vacatur

Federal Rule of Civil Procedure 60(b) permits a court to relieve a party from a final judgment, order, or proceeding for "mistake . . . or any other reason that justifies relief." In granting relief under Rule 60(b), courts must "strike[] a balance between serving the ends of justice and preserving the finality of judgements." Nemaizer v. Baker, 793 F. 2d 58, 61 (2d Cir. 1986). This is "extraordinary judicial relief" that should be "invoked only upon a showing of exceptional circumstances," but that must also be "broadly construed to do 'substantial justice.'" Id. at 61 (quoting Seven Elves, Inc. v. Eskenazi, 635 F.2d 396, 401 (5th Cir. 1981)).

B. Patent Eligibility under § 101

"Section 101 of the Patent Act defines the subject matter eligible for patent protection." Alice, 134 S. Ct. at 2354. It provides:

> Whoever 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. "The Supreme Court has 'interpreted § 101 and its predecessors . . . for more than 150 years' to 'contain[] an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable.'" Rapid Litig. Mgmt. Ltd. v. CellzDirect, Inc., 827 F.3d 1042, 1047 (Fed. Cir. 2016) (quoting Alice, 134 S. Ct. at 2354). Monopolization of these "basic tools of scientific and technological work . . . might tend to impede innovation more than it would tend to promote it,' thereby thwarting the primary object of the patent laws." Alice, 134 S. Ct. at 2354 (quoting Mayo Collaborative Servs. v. Prometheus Labs., Inc. ("Mayo"), 132 S. Ct. 1289, 1293 (2012)) (alterations omitted); see also Synopsys, Inc. v. Mentor Graphics Corp., 839 F.3d 1138, 1146-47 (Fed. Cir. 2016) ("[W]e continue to 'treat[] analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes within the abstract-idea category.'") (quoting Elec. Power Grp., LLC v. Alstom S.A., 830 F.3d 1350, 1354 (Fed. Cir. 2016)). However, these exceptions to patent eligibility must not be applied beyond the limits of the exception's purpose of preventing the preemption of new discoveries. Otherwise, "this exclusionary principle [could] swallow all of patent law." Alice, 134 S. Ct. at 2354. Nor is the § 101 inquiry a replacement for, or coterminous with, investigation of novelty or obviousness under §§ 102 and 103.

"The issue of patent-eligibility under § 101 is a question of law[.]" CellzDirect, 827 F.3d at 1047. At least one the Federal Circuit judge has expressed the view that "no presumption of eligibility attends the section 101 inquiry." Ultramercial, Inc. v. Hulu, LLC, 772 F.3d 709, 717, 720-21 (Fed. Cir. 2014) (Mayer, J., concurring). To determine whether claims contain ineligible patent subject matter under § 101, the Court must apply the two-step test introduced in Mayo, 132 S. Ct. 1289, and further explained in Alice, 134 S. Ct. 2347.

1. Alice Step One

At Alice step one, a court must determine whether the claimed invention is "directed to" ineligible subject matter, including "abstract ideas." Alice, 134 S. Ct. at 2355. This step requires a court to consider the claims "in their entirety to ascertain whether their character as a whole is directed to excluded subject matter." Internet Patents Corp. v. Active Network, Inc., 790 F.3d 1343, 1346 (Fed. Cir. 2015). However, the Supreme Court "has not established a definitive rule to determine what constitutes an 'abstract idea' sufficient to satisfy the first step of the Mayo/Alice inquiry." Enfish, 822 F.3d at 1334. Rather, the Supreme Court and the Federal Circuit "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 the two years since Alice, the Federal Circuit has frequently held ineligible patents that involve "fundamental economic and conventional business practices," the addition of "conventional computer components to well-known business practices," or the "use of an abstract mathematical formula on any general purpose computer;" or that recite "a purely conventional computer implementation of a

mathematical formula" or "generalized steps to be performed on a computer using conventional computer activity." Enfish, 822 F.3d at 1335, 1338. See also Tranxition, Inc. v. Lenovo (United States) Inc., ___ F. App'x ___, 2016 WL 6775967 at *3 (Fed. Cir. 2016) ("It is necessarily true that a human might apply an abstract idea in a different manner from a computer. What matters is the application. 'Stating an abstract idea while adding the words 'apply it with a computer" will not render an abstract idea non-abstract.' There must be more.") (quoting Alice, 134 S. Ct. at 2359) (internal citation omitted). The Federal Circuit generally found the claims ineligible when they merely required generic computer implementation at a high level of generality and failed to effect an improvement in any technology or technical field. See, e.g., Versata Dev. Grp., Inc. v. SAP Am., Inc., 793 F.3d 1306, 1333 (Fed. Cir. 2015); Intellectual Ventures I LLC v. Capital One Bank (USA), 792 F.3d 1363, 1367-68 (Fed. Cir. 2015); Internet Patents, 790 F.3d at 1348; OIP Techs., Inc. v. Amazon.com, Inc., 788 F.3d 1359, 1362-63 (Fed. Cir. 2015); Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n, 776 F.3d 1343, 1347 (Fed. Cir. 2015); buySAFE, Inc. v. Google, Inc., 765 F.3d 1350, 1354-55 (Fed. Cir. 2014); Planet Bingo, LLC v. VKGS LLC, 576 F. App'x 1005, 1008 (Fed. Cir. 2014); Digitech Image Techs., LLC v. Elecs. for Imaging, Inc., 758 F.3d 1344, 1351 (Fed. Cir. 2014).

However, the Federal Circuit has clarified the outer bounds of the Alice doctrine of ineligibility. Applying Alice step one, the court in Enfish concluded that the claims were patent eligible under § 101 and stated that it "d[id] not read Alice to

broadly hold that all improvements in computer-related technology are inherently abstract" such that a court must immediately move to step two. Enfish, 822 F.3d at 1335. The core question underlying step one is "whether the focus of the claims is on the specific asserted improvement in computer capabilities . . . or, instead, on a process that qualifies as an 'abstract idea' for which computers are invoked merely as a tool." Id. at 1335-36. The "directed to" inquiry at Alice step one "cannot simply ask whether the claims involve a patent-ineligible concept, because essentially every routinely patent-eligible claim involving physical products and actions involves a law of nature and/or natural phenomenon[.]" Id. at 1335 (emphasis in original); see also Amdocs, ___ F.3d ___, 2016 WL 6440387 at *9 ("We recognize . . . that at some level, all inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.") (internal quotation marks omitted) (emphasis in original). Instead, at step one, patent claims must be "considered in light of the specification, based on whether 'their character as a whole is directed to excluded subject matter.'" Enfish, 822 F.3d at 1335 (quoting Internet Patents, 790 F.3d at 1346). In light of Enfish and other post-Alice decisions, "it is clear that the main thrust behind step one is to determine whether the claim moves beyond a long-understood concept or simply seeks to monopolize one by masking it through the medium of technology. To resolve this question, a court must define the idea, and then ask whether that idea, in all of its generic permutations, essentially constitutes the invention, or whether the invention is to accomplish the abstract

idea in a particular way." Iron Gate Sec. v. Lowe's Co., 2016 WL 4146140, at *8 (S.D.N.Y. Aug. 3, 2016).

2. Alice Step Two

The fact that a claim is directed to a patent-ineligible concept does not necessarily mean it is patent-ineligible under § 101. Alice, 134 S. Ct. at 2354 ("[A]n invention is not rendered ineligible for patent simply because it involves an abstract concept."). Alice requires a court to "examine the elements of the claim to determine whether it contains an inventive concept sufficient to transform the claimed abstract idea into a patent-eligible application." Id. at 2357 (internal quotation marks omitted). The Court must look to the remaining elements aside from those directed to an abstract idea, either in isolation or combination with the other non-patent-ineligible elements. E.g., Versata, 793 F.3d at 1334; In re BRCA1- & BRCA2-Based Hereditary Cancer Test Patent Litig., 774 F.3d 755, 764 (Fed. Cir. 2014); see also Bascom Global Internet Servs., Inc. v. AT&T Mobility LLC, 827 F.3d 1341, 1349 (Fed. Cir. 2016) ("The 'inventive concept' may arise in one or more of the individual claim limitations or in the ordered combination of the limitations."); I/P Engine, Inc. v. AOL Inc., 576 F. App'x 982, 993 (Fed. Cir. 2014) (Mayer, J., concurring). "Step two is 'a search for an inventive concept—i.e., an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the ineligible concept itself.'" Intellectual Ventures I LLC v. Symantec Corp., ___ F.3d ___, 2016 WL 5539870 at *3 (Fed. Cir. Sept. 30, 2016) (quoting Alice, 134 S. Ct. at 2355).

The scope of inquiry appropriate for Alice step two is limited to eligibility only. The Court must not to delve into whether the patents-in-suit are invalid under §§ 102 or 103 for lack of novelty or non-obviousness—Alice did not strike down the statutory distinctions between eligibility under § 101 and invalidity under §§ 102 and 103. See Parker v. Flook, 437 U.S. 584, 588 (1978) ("This case turns entirely on the proper construction of § 101 of the Patent Act, which describes the subject matter that is eligible for patent protection. It does not involve the familiar issues of novelty and obviousness that routinely arise under §§ 102 and 103 when the validity of a patent is challenged.") (footnote omitted); Intellectual Ventures I, 2016 WL 5539870 at *4 ("Indeed, [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.") (internal quotation marks omitted); CLS Bank Int'l v. Alice Corp. Pty. Ltd., 717 F.3d 1269, 1284 (Fed. Cir. 2013) ("We do not therefore understand that language to be confused with novelty or nonobviousness analyses, which consider whether particular steps or physical components together constitute a new or nonobvious invention. Analyzing patent eligibility, in contrast, considers whether steps combined with a natural law or abstract idea are so insignificant, conventional, or routine as to yield a claim that effectively covers the natural law or abstract idea itself."); Chamberlain Grp., Inc. v. Linear LLC, 114 F. Supp. 3d 614, 627 (N.D. Ill. 2015) ("Defendant's argument, however, treads too closely to allegations of novelty and obviousness. . . . [T]hat analysis is more appropriately

addressed as a question of what constitutes the prior art and whether the [patent] claims hold any novelty[.]"); see also 35 U.S.C. §§ 102, 103.

The proper question is therefore not whether the invention is novel or whether it would be obvious to someone skilled in the art, but whether the claims contain an inventive concept such that the invention does not claim an abstract idea. Reciting "only routine and conventional steps" is insufficient to state an inventive concept, BRCA, 774 F.3d at 765; see also In re Smith, 815 F.3d 816, 819 (Fed. Cir. 2016) ("[A]ppending purely conventional steps to an abstract idea does not supply a sufficiently inventive concept."); as is simply adding a computer to an abstract idea, DDR Holdings, LLC v. Hotels.com, L.P., 773 F.3d 1245, 1256 (Fed. Cir. 2014) ("[R]ecitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible."). However, claims that "'purport[] to improve the functioning of the computer itself' or 'effect an improvement in any other technology or technical field'" suffice under step two. Mortgage Grader, 811 F.3d at 1325 (quoting Alice, 134 S. Ct. at 2359); see also Amdocs, ___ F.3d ___, 2016 WL 6440387 at *10 (explaining that a "solution [that] requires arguably generic components" is still patent eligible when "these generic components operate in a nonconventional manner to achieve and improvement in computer functionality" that is "a critical advancement over the prior art"). An inventive concept may also be present where the claim involves "the non-conventional and non-generic arrangement of known, conventional places." Bascom Global, 2016 WL 3514158, at *6.

The Court has developed the following list of non-exhaustive questions relevant to the step-two analysis:

> (1) Is there an improvement recited?
>
> (2) Is there a benefit recited?
>
> (3) Is something new recited?
>
> (4) Does the patent have one or more particular applications?
>
> (5) What are the steps and limits to be followed in applying the invention?

Iron Gate Sec., 2016 WL 4146140 at *10. These questions cut to the nub of the issue: whether the claimed invention merely attempts to monopolize ineligible subject matter in a particular setting, or whether it actually works an improvement in human knowledge. Only the latter may receive patent protection.

V. ANALYSIS

TRA seeks vacatur on the basis that the February 22, 2016 Opinion "oversimplified" the claims and "downplayed the invention' benefits." Enfish, 822 F.3d at 1338. It argues that "double-blind matching," upon which the Court focused so much attention, is merely "one of many steps in the asserted claims." (TRA Brief in Support of Vacatur, ECF No. 275 at 2.) This Court agrees.

The invention set forth in the '940 Patent, and claim 71 in particular, seeks to solve a known industry problem: determining the value proposition of an advertising campaign in today's fragmented digital environment. The patent describes the digital environment as both a reason that data is difficult to obtain

(e.g., consumers view media on many platforms and switch between them), and an opportunity (if captured, that data can have enormous informative potential). Claim 71 addresses this issue and, through a series of steps specifically outlined and illustrated in the figures, provides a solution. The method is not at a high level of generality or abstraction; it posits limited, concrete steps.

The Court disagrees with the February 22, 2016 Opinion at both steps of the Alice analysis. In terms of step one, claim 71 is not directed at an abstract idea of double-blind matching. Double-blind matching is just one aspect of the method claimed. It is a step that acknowledges that collecting the vast amount of data about specific households carries privacy concerns. (Such concerns are real, but they are an issue for another forum and another day).

Instead, claim 71 is directed at the concrete idea that there are today numerous digital media platforms which can be mined for information about second-by-second or minute-by-minute household viewing; that data can be as granular as whether the volume is turned down during a commercial break, or whether the channel is switched away and then switched back. That viewing data can be gathered as to a substantial number of households—privacy protected—and compared to equally granular data on purchasing behavior, and then various analyses can be created that rely on this level of detail. This is no abstraction and is described at an advancement.

It is, of course, possible for a court to reduce the method to an abstract description of, for example, "collecting viewing and purchasing data to analyze the

utility of an advertising campaign." Indeed, virtually any invention can be reduced to a concept. "Method" inventions may be particularly vulnerable to such abstract characterizations. But "method" patents are certainly allowed under existing patent law. See, e.g., Bilski v. Kappos, 561 U.S. 593, 606-07 (2010). The key question is whether the abstract summary embodies the totality of the invention is all that the invention is—in other words, is the invention nothing more than the abstract concept? Here, the answer is plainly no. This is demonstrated by the type of multi-sourced, granular collection of data that allows for real-time calculations of utility. The claim limitations, read against the specification, are critical to this understanding.

But, in addition, even if it were directed to an abstract concept, the inventiveness asserted in the patent (which this Court has no reason or factual basis to second guess) allows it to survive step two of the Alice analysis. As an initial matter, the specification sets out various problems to be addressed by the patent: Advertisers not having an ability assess utility in real time, or with a sufficiently large sample size, are just two examples described above. The method disclosed in claim 71 directly addresses these issues and provides for the improvement needed: a method that can only be implemented on a computer given the size and complexity of the task at hand, and a step-by-step way to collect, store, cleanse, and analyze data.

The inventiveness of the claimed method is, again, embodied in the claim limitations read against the specifications. The method provides the steps needed

to capture—for instance—a viewer's momentary reduction in volume of a device, combined with a subsequent purchase of a competitor's product, to inform an advertiser of shortcomings in its ad campaign; likewise, it allowed large demographic studies that would permit analysis of whether education or income level correlates to similar viewing and purchasing behavior.

So long as "methods" are patent-eligible, claim 71 must pass muster under Alice. Therefore, while it is possible there are other issues with claim 71 that prevent TRA from ultimately prevailing in this matter, failing step two of Alice is not one of them.

VI. CONCLUSION

For the reasons set forth above, the ruling of February 22, 2016, at ECF No. 226 is VACATED.

Within two weeks from the date of this Order, the parties shall provide the Court with a proposal as to how to proceed to final resolution of this matter.

SO ORDERED.

Dated: New York, New York
November 29, 2016

KATHERINE B. FORREST
United States District Judge