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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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Ex parte WALTER F. LO FARO and CHRISTOPHER J. MERZ

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Appeal 2017-007619[1]
Application 12/783,195[2]
Technology Center 3600

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Before HUBERT C. LORIN, NINA L. MEDLOCK, and
BRADLEY B. BAYAT, *Administrative Patent Judges*.

MEDLOCK, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's final
rejection of claims 1–5, 7, and 9–39. We have jurisdiction under 35 U.S.C.
§ 6(b).

We AFFIRM.

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[1] Our decision references Appellants' Appeal Brief ("App. Br.," filed
November 1, 2016) and Reply Brief ("Reply Br.," filed April 24, 2017), and
the Examiner's Answer ("Ans.," mailed February 24, 2017), and Final
Office Action ("Final Act.," mailed July 1, 2016).
[2] Appellants identify MasterCard International Incorporated as the real party
in interest. App. Br. 1.

CLAIMED INVENTION

Appellants' claimed invention "relates generally to populating customer profiles, and more particularly, to a computer-based system and method for transaction based profiling of customers within a merchant network" (Spec. ¶ 2).

Claims 1, 18, and 33 are the independent claims on appeal. Claim 1, reproduced below with bracketed numerals added, is illustrative of the claimed subject matter:

> 1.   A computer-based method for determining a targeted marketing campaign for a candidate cardholder based upon a customer profile, the customer profile being an improved customer profile, the customer profile including a pattern of usage of a payment card by the candidate cardholder at a subdivision level with a business entity, the candidate cardholder having an account associated with the payment card, the payment card issued by an issuer and registered in a payment card network to the candidate cardholder, said method performed using a computer coupled to a plurality of databases, the computer comprising one or more processors communicatively coupled to a memory, the memory comprising instructions, which when executed by the one or more processors, performs the steps of:
>
> [(a)] receiving, through the payment card network, a plurality of transaction authorization requests including transaction information for a plurality of cardholders for transactions with a business entity, the transaction information including data representing each transaction initiated by the plurality of cardholders with the business entity using an associated payment card, the plurality of cardholders including the candidate cardholder;

[(b)] receiving, from the business entity that is participating in a rewards system, through a rewards system data warehouse of the payment card network, merchant data associated with the transactions with the business entity, the merchant data including raw SKU transaction data and an indication of a subdivision within the business entity in which the transactions occurred;

[(c)] storing the transaction authorization requests including transaction information within a first database of the plurality of databases;

[(d)] storing the merchant data within a second database of the plurality of databases;

[(e)] generating a customer profile using the stored transaction information and the stored merchant data, for each of the plurality of cardholders, each customer profile representing a pattern of usage of the associated payment card by the cardholder in each subdivision of the business entity, each customer profile including a type, a recency and a frequency of transactions initiated by the cardholder associated with the customer profile using the associated payment card at the subdivision of the business entity;

[(f)] electronically generating a score for each of the customer profiles of each respective cardholder, the score of a respective customer profile being based on a previously stored transaction-based model, and spending behavior of the customer profile of the respective cardholder in comparison to spending behavior of the customer profiles of the other cardholders among the plurality of cardholders;

[(g)] electronically clustering the customer profile of the candidate cardholder into a group with other customer profiles of the plurality of cardholders having a score that is within a predetermined range of a score of the customer profile of the candidate cardholder with respect to the subdivision of the business entity and also registered within the payment card network;

[(h)] identifying patterns of spending behavior of each of the cardholders within the clustered group including the candidate cardholder, with respect to the subdivision of the business entity; and

[(i)]   transmitting, to the candidate cardholder, marketing campaign information based on the identified patterns of the spending behavior of the cardholders within the clustered group.

REJECTION

Claims 1–5, 7, and 9–39 are rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.

ANALYSIS

Under 35 U.S.C. § 101, an invention is patent-eligible if it claims a "new and useful process, machine, manufacture, or composition of matter." 35 U.S.C. § 101. The Supreme Court, however, has long interpreted § 101 to include an implicit exception: "[l]aws of nature, natural phenomena, and abstract ideas" are not patentable. *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014).

The Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66 (2012), "for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts." *Alice Corp.*, 573 U.S. at 217. The first step in that analysis is to "determine whether the claims at issue are directed to one of those patent-ineligible concepts." *Id.* If the claims are not directed to a patent-ineligible concept, e.g., an abstract idea, the inquiry ends. Otherwise, the inquiry proceeds to the second step where the elements of the claims are considered "individually and 'as an ordered combination'" to determine whether there are additional elements that "'transform the nature of the claim' into a patent-eligible application." *Id.* (quoting *Mayo*, 566 U.S. at 79, 78).

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The Court acknowledged in *Mayo*, that "all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." *Mayo*, 566 U.S. at 71. Therefore, the Federal Circuit has instructed that claims are to be considered in their entirety to determine "whether their character as a whole is directed to excluded subject matter." *McRO, Inc. v. Bandai Namco Games Am., Inc.*, 837 F.3d 1299, 1312 (Fed. Cir. 2016) (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015)).

We are not persuaded, as an initial matter, that the Examiner erred in determining that the claims are directed to an abstract idea or that the Examiner otherwise overgeneralized the concept to which the claims are directed without taking the actual claim language into account (App. Br. 6-14). There is no requirement that the Examiner's formulation of the abstract idea copy the claim language. And, as described below, the Examiner's characterization of the claims (i.e., as directed to collecting market information to determine consumer trends (Final Act. 2–3)) is fully consistent with the Specification.[3]

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[3] An abstract idea, moreover, can be expressed at various levels of abstraction. *See Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240–41 (Fed. Cir. 2016) ("An abstract idea can generally be described at different levels of abstraction. As the Board has done, the claimed abstract idea could be described as generating menus on a computer, or generating a second menu from a first menu and sending the second menu to another location. It could be described in other ways, including, as indicated in the specification, taking orders from restaurant customers on a computer."). That the claim language includes more words than the phrase the Examiner used to articulate the abstract idea, and that the Examiner, thus, articulates the abstract idea at a higher level of abstraction than would Appellants is an

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The Federal Circuit has explained that "the 'directed to' inquiry applies a stage-one filter to claims, considered in light of the [S]pecification, based on whether 'their character as a whole is directed to excluded subject matter.'" *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) (quoting *Internet Patents Corp.*, 790 F.3d at 1346). It asks whether the focus of the claims is on a specific improvement in relevant technology or on a process that itself qualifies as an "abstract idea" for which computers are invoked merely as a tool. *See id.* at 1335–36. Here, it is clear from the Specification, including the claim language that the claims focus on an abstract idea, and not on any improvement to computer technology and/or functionality.

The Specification is entitled "METHOD AND SYSTEM FOR TRANSACTION BASED PROFILING OF CUSTOMERS WITHIN A MERCHANT NETWORK." The Background section of the Specification describes that a challenge in the field is to predict the future behavior of customers "at any one of a purchase, merchant or merchant network level so that card networks, card issuers, and merchants accepting the cards for payments can provide the services that will result in retention of existing customers and will attract new card users" (Spec. ¶ 7). The claimed invention is ostensibly intended to address this challenge by gathering transaction data and using that data to determine and populate customer/cardholder loyalty profiles (*see, e.g.*, claim 1 ("A computer-based method for determining a targeted marketing campaign for a candidate cardholder based upon a customer profile"); Spec. ¶ 2 ("This invention

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insufficient basis for determining that the claims are not directed to an abstract idea.

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relates generally to populating customer profiles, and more particularly, to a computer-based system and method for transaction based profiling of customers within a merchant network."); *id.* ¶ 18 ("Described herein are exemplary embodiments of systems and processes for providing a transaction-based approach to determine and populate a loyalty profile of a cardholder.")).

Considered in light of the Specification, the purported advance over the prior art is, thus, a way of populating customer profiles, based on the customers' previous transactions, for use in implementing targeted marketing campaigns. In that context, claim 1 is directed to (1) collecting transaction information for cardholders (steps (a) – (d)); (2) storing the collected data in a customer profile (step (e)); (3) analyzing the stored data to generate a score for each customer profile (step (f)); (4) clustering the customer profiles based on the scores (step (g)); (5) identifying patterns of spending behavior of cardholders (step (h)); and (6) transmitting marketing campaign information to a cardholder based on the identified patterns (step (i)) — in other words, to targeted advertising based on identified patterns of consumer spending behavior, which is a fundamental economic practice, i.e., a method of organizing human activity and, therefore, an abstract idea.

The Federal Circuit has consistently held that abstract ideas include the concepts of collecting data, analyzing the data, and displaying the results of the collection and analysis, including when limited to particular content. *See, e.g., Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1340 (Fed. Cir. 2017) (identifying the abstract idea of collecting, displaying, and manipulating data); *Elec. Power Grp., LLC v. Alstom S.A.*,

830 F.3d 1350, 1354 (Fed. Cir. 2016) (characterizing collecting information, analyzing information by steps people go through in their minds, or by mathematical algorithms, and presenting the results of collecting and analyzing information, without more, as matters within the realm of abstract ideas); *see also SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1168 (Fed. Cir. 2018) ("As many cases make clear, even if a process of collecting and analyzing information is 'limited to particular content' or a particular 'source,' that limitation does not make the collection and analysis other than abstract." (quoting *Elec. Power Grp.*, 830 F.3d at 1353, 1355 (citing cases)). Targeting customers with particular targeted marketing material also is a longstanding marketing and advertising practice, and is substantially similar to economic practices that the courts have found patent-ineligible. *See, e.g.*, *Morsa v. Facebook, Inc.*, 77 F. Supp. 3d 1007, 1013 (C.D. Cal. 2014), *aff'd*, 622 F. App'x 915 (Fed. Cir. 2015) (concluding that targeting advertisements to certain consumers is no more than an abstract idea); *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 713 (Fed. Cir. 2014) (offering media content in exchange for viewing an advertisement); *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1370 (Fed. Cir. 2015) (tailoring information presented to a user based on particular information); *Affinity Labs of Texas, LLC v. Amazon.com, Inc.*, 838 F.3d 1266, 1271 (Fed. Cir. 2016) (customizing a user interface to have targeted advertising based on user information).

The Specification describes, as mentioned above, that transaction data for a customer is gathered and utilized to populate loyalty profiles (Spec. ¶ 19), and that "[t]hese profiles can then be used in a near real-time environment for implementing campaigns that increase a customer's spend,

frequency of visit, and the breadth of spend within the store or with a merchant" (*id.*). It, thus, clearly appears from the Specification that the focus of the claimed invention is on addressing a business objective (i.e., providing marketing campaigns to targeted individuals to increase customer spending), and not on any claimed means for accomplishing that goal that improves technology.

We find no indication in the Specification, nor do Appellants direct us to any indication, that the operations recited in claim 1, for example, invoke any assertedly inventive programming, require any specialized computer hardware or other inventive computer components, i.e., a particular machine, or that the claimed invention is implemented using other than generic computer components to perform generic computer functions. *See DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014) ("[A]fter *Alice*, there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible."). In fact, the Specification suggests just the opposite, i.e., that the claimed invention may be implemented using only generic computer components (*see, e.g.*, Spec. ¶¶ 34–41).

We also find no indication in the Specification that the claimed invention effects a transformation or reduction of a particular article to a different state or thing. Nor do we find anything of record, short of attorney argument, that attributes any improvement in technology or a technical field to the claimed invention or that otherwise indicates that the claimed invention integrates the abstract idea into a "practical application," as that

phrase is used in the USPTO's "2019 Revised Patent Subject Matter Eligibility Guidance," 84 Fed. Reg. 50, 55 (January 7, 2019).[4]

Appellants argue that "the rejection offers absolutely no evidence that the claims are directed to the alleged 'abstract idea'" (App. Br. 9) and that "the Examiner has failed to establish a *prima facie* case for asserting that the claims are directed to an abstract idea" (*id.*). That argument is not persuasive at least because there is no requirement that an examiner provide evidentiary support in every case before a conclusion can be made that a claim is directed to an abstract idea. Evidence may be helpful, e.g., where facts are in dispute. But, it is not always needed. *See Mortgage Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1325–26 (Fed. Cir. 2016) ("[I]t is also possible, as numerous cases have recognized, that a § 101 analysis may sometimes be undertaken without resolving fact issues."). Appellants' bare assertion that evidence is needed here, without any

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[4] In accordance with the USPTO's revised guidance, a claim will be considered "directed to" an abstract idea if (1) the claim recites subject matter falling within one of the following groupings of abstract ideas: (a) mathematical concepts; (b) certain methods of organizing human interactions, e.g., fundamental economic principles or practices, commercial or legal interactions; and (c) mental processes, and (2) the claim does not integrate the abstract idea into a practical application. *See* Revised Guidance, 84 Fed. Reg. at 54–55. The Revised Guidance references Manual of Patent Examining Procedure ("MPEP") §§ 2106.05 (a)–(c) and (e)–(h) in describing the considerations that are indicative that an additional element or combination of elements integrates the judicial exception, e.g., the abstract idea, into a practical application. *Id.* at 55. If the recited judicial exception is integrated into a practical application, as determined under one or more of these MPEP sections, the claim is not "directed to" the judicial exception.

supporting reasoning as to why, is insufficient to require the Examiner to provide evidentiary support.[5]

The Federal Circuit, moreover, has observed repeatedly that "the prima facie case is merely a procedural device that enables an appropriate shift of the burden of production." *Hyatt v. Dudas*, 492 F.3d. 1365, 1369 (Fed. Cir. 2007) (citing *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992)). The court has, thus, held that the USPTO carries its procedural burden of establishing a prima facie case when its rejection satisfies the requirements of 35 U.S.C. § 132 by notifying the applicant of the reasons for the rejection, "together with such information and references as may be useful in judging of the propriety of continuing the prosecution of [the] application." *See In re Jung*, 637 F.3d 1356, 1362 (Fed. Cir. 2011) (alteration in original). Thus, what is required of the Office is that it sets forth the statutory basis of the rejection in a sufficiently articulate and informative manner as to meet the notice requirement of § 132. *Id.*; *see also Chester v. Miller*, 906 F.2d 1574, 1578 (Fed. Cir. 1990) ("Section 132 is violated when a rejection is so uninformative that it prevents the applicant from recognizing and seeking to counter the grounds for rejection.").

Here, in rejecting the pending claims under § 101, the Examiner notified Appellants of the reasons for the rejection in a sufficiently articulate and informative manner as to meet the notice requirement of § 132 (*see* Final Act. 2–3). And we find that the Examiner, in doing so, set forth a prima facie case of patent-ineligibility.

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[5] We note that Appellants have put forward no rebuttal evidence showing the claims are not directed to an abstract idea.

Appellants further argue that the claims are not directed to an abstract idea because they "improve the technical field of predictive modeling" (App. Br. 9). Appellants maintain that the claims do so by "reciting a method of accurately targeting a cardholder for a marketing campaign based on electronically generated patterns of usage that are modeled using improved customer profiles" and that "[t]he claimed systems and methods result in . . . targeted marketing campaigns that are more closely tailored to individual customers' spending patterns, thereby specifically improving the technical field of predictive modeling" (id.). But, we are not persuaded that producing marketing campaigns that are more closely tailored to individual customers' spending patterns is a technical improvement, as opposed to an improvement in a business practice, i.e., targeted advertising.

Appellants assert that "[c]laim 1 allows for the generation of an improved customer profile based on two different types of non-public data[6] that [are] generally unattainable and not previously utilized together" and, thus, allows for "better detection of detailed changes in spending of the customer and transmitting better targeted marketing material to the customer" (App. Br. 10–11; see also id. at 16 ("two different types of previously unattainable data")). Appellants maintain that this improved customer profile "is an improvement on existing technology because the two different types of data . . . are . . . capable of being linked and utilized

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[6] Appellants describe the two types of data as including (1) transaction information for a plurality of cardholders for transactions with a business entity received through the payment card network; and (2) merchant data that include raw SKU transaction data associated with the transactions with the business entity received from a rewards system data warehouse (App. Br. 10–11).

together to generate a more detailed and precise improved customer profile" (*id.* at 11). We, however, fail to see how, and Appellants have not adequately explained how, collecting and analyzing "different types of non-public data" in order to populate a loyalty profile of a cardholder amounts to a technological improvement where, as here, there is no indication that any allegedly inventive programming is invoked or that any specialized or inventive computer components are required.

Moreover, to the extent the claimed method, as recited in claim 1, allows for the generation of "improved customer profiles" (e.g., profiles including "raw SKU transaction data"), as argued by Appellants, we do not see how the informational content of the customer profile[7] alters the § 101 analysis. *Cf. Praxair Distribution, Inc. v. Mallinckrodt Hospital Products IP Ltd.*, 890 F.3d 1024, 1032 (Fed. Cir. 2018) ("Claim limitations directed to the content of information and lacking a requisite functional relationship are not entitled to patentable weight because such information is not patent eligible subject matter under 35 U.S.C. § 101.").

Appellants argue that the pending claims, similar to those in *McRO*, are directed to "a specific asserted improvement in predictive modeling, not an abstract idea," and recite "a specific method" for generating a customer profile using stored transaction data and cardholder's usage patterns that improves upon manual methods and known computer-based methods for profiling customers (App. Br. 11–12). Yet, we are not persuaded that there

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[7] Claim 1 recites, *inter alia*, "receiving . . . merchant data including raw SKU transaction data" and "generating a customer profile using the stored transaction information and the stored merchant data." (App. Br. 17 (Claims Appendix)).

is any parallel between the present claims and the claim in *McRO* that the court determined was not directed to an abstract idea.

In *McRO*, the Federal Circuit concluded that the claim, when considered as a whole, was directed to a "technological improvement over the existing, manual 3-D animation techniques" and "uses the limited rules in a process specifically designed to achieve an improved technological result in conventional industry practice." *McRO*, 837 F.3d at 1316. Specifically, the Federal Circuit found that the claimed rules allow computers to produce accurate and realistic lip synchronization and facial expressions in animated characters that previously could only be produced by human animators; and the rules are limiting because they define morph weight sets as a function of phoneme sub-sequences. *Id.* at 1313.

Appellants have not identified any analogous improvement here that is attributable to the claimed invention. Although generating a customer profile using stored transaction data and cardholder's usage patterns may improve a business process, i.e., developing a targeted marketing campaign, it does not achieve an improved technological result. We see no parallel between the limiting rules described in *McRO* and the use of stored transaction data and cardholder's usage patterns to generate a customer profile, as recited in Appellants' claims.

We also do not agree with Appellants that the Federal Circuit's ruling in *Enfish* impacts the patent-eligibility of the present claims (App. Br. 14). The claims at issue in *Enfish* were directed to a specific type of data structure, i.e., a self-referential table for a computer database, designed to improve the way a computer carries out its basic functions of storing and retrieving data. *Enfish*, 822 F.3d at 1335–36. There, in rejecting a § 101

challenge, the court held that "the plain focus of the claims is on an improvement to computer functionality itself, not on economic or other tasks for which a computer is used in its ordinary capacity." *Id.* at 1336.

We find no parallel here between the pending claims and the claims in *Enfish* nor any comparable aspect in the pending claims that represents an improvement to computer functionality. Appellants argue that the pending claims are analogous to those in *Enfish* because they are not directed to a fundamental economic practice or mathematical equation but instead to "a specific implementation of a solution" (i.e., (targeted marketing campaigns built based on improved customer profiles that are generated from SKU-level transaction data segmented at a business entity level) to a problem in the software arts (i.e., overbroad profiling that cannot account for business-entity level data) (App. Br. 14). But, we are not persuaded that "overbroad profiling," which Appellants ostensibly characterize as the "inability to accurately predict consumer behavior and generate targeted marketing campaigns at a business entity subdivision level" (*id.* at 15), is a technical problem, as opposed as to a business problem. We also are not persuaded that building targeted marketing campaigns based on customer profiles generated from SKU-level transaction data segmented at a business entity level is a technological improvement, as opposed to an improvement to a business practice, i.e., developing targeted marketing campaigns — a process in which a computer is used as a tool in its ordinary capacity.

Referencing the USPTO's Abstract Ideas Examples,[8] Appellants point to the claims in Example 4 as an instance in which claims directed to an improved algorithm that allows better processing of GPS satellite signals were found patent-eligible (App. Br. 15–16). The claims in Example 4, however, are hypothetical claims modeled after the technology in *SiRF Technology Inc. v. International Trade Commission*, 601 F.3d 1319 (Fed. Cir. 2010); they are not actual claims at issue in that case.

In *SiRF*, Appellants challenged the Commission's determination that the asserted claims of the '801 and '187 patents,[9] which are directed to calculating an absolute position of a GPS receiver, recite patent-eligible subject matter under § 101. *SiRF*, 601 F.3d at 1331–32. In affirming the Commission's decision, the Federal Circuit held "that the claims at issue are properly directed to patentable subject matter as they explicitly require the use of a *particular machine* (a GPS receiver) and could not be performed without the use of such a receiver." *Id.* at 1333 (emphasis added).

Appellants assert here that "[s]imilarly, the pending claims are directed to generating an improved customer profile that allows for the determination and transmission of better targeted marketing information to a customer based on these two different types of previously unattainable data" and that "the customer profile recited in the Claims is at least an improvement over known customer profiles by virtue of the claimed customer profile incorporating stock-keeping unit (SKU) level transaction

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[8] *See* January 2015 Update, Appendix 1: Examples (available at https://www.uspto.gov/sites/default/files/documents/abstract_idea_examples.pdf)

[9] U.S. Patent Nos. 6,417,801 ("the '801 patent") and U.S. Patent No. 6,937,187 ("the '187 patent").

data at a business entity subdivision level" (App. Br. 16). But, we do not see, and Appellants do not adequately explain, how an "improved customer profile" that contains "previously unattainable data" is similar to an improved technique for computing the position of a particular GPS receiver. Also unlike the situation in *SiRF*, Appellants do not contend that the pending claims are tied to a particular machine.

Turning to the second step of the *Mayo/Alice* framework, Appellants argue that the pending claims "overcome a problem arising in computer networks" (i.e., the inability to accurately predict consumer behavior and generate targeted marketing campaigns at a business entity subdivision level) and that "[a]s such, the independent claims necessarily recite 'significantly more' than the alleged 'abstract idea'" (App. Br. 14–15 (citing *DDR Holdings*). We are not persuaded that accurately predicting consumer behavior and generating targeted marketing campaigns is a problem particular to computer networks. As mentioned above, targeted advertising existed before and still exists outside of computer technology and computer networks. *See Tuxis Technologies, LLC v. Amazon.com, Inc.*, No. CV 13-1771-RGA, 2014 WL 4382446, at *5 (D. Del. Sept. 3, 2014) (Matching consumers with a given product or service "has been practiced as long as markets have been in operation."). And the purported solution here of, at best, generic computer components performing generic computer functions, is not necessarily rooted in computer technology.

Appellants further argue that "the pending claims recite an inventive concept as defined by the decision in *BASCOM*" (App. Br. 12; *see also id.*

at 15).[10] Appellants note that "[i]n *BASCOM*, the inventive concept related to using a remote ISP server to associate a request for Internet content with a specific individual account" (*id.* at 13). And Appellants argue that the pending claims similarly "recite a method including generating a customer profile that represents a usage pattern associated with a subdivision of a business entity" (*id.*). Appellants also argue that, as in *BASCOM*, where a filtering tool was remote from end-users but nevertheless applied their customizations and preferences, "the pending claims recite a method where a remote SKU-based loyalty profile engine is able to **electronically generate a score for each of the customer profiles of each respective cardholder**" (*id.*). In other words, according to Appellants, "the pending claims recite a method for remote-scoring of a customer profile (remote-filtering in *BASCOM*) using spending behavior of individual customers (filter customizations of individual customers in *BASCOM*)" (*id.*).

Appellants' arguments are unpersuasive at least because they are not commensurate with the scope of the claims. Claim 1, for example, does not recite "a *remote* SKU-based loyalty profile engine" or any other remote arrangement of computer components. Indeed, claim 1 does not recite a "loyalty profile engine" or any other "engine." And we find no disclosure in the Specification of the remote SKU-based loyalty profile engine or remote-scoring argued by Appellants; nor do Appellants direct us to any portion of the Specification that discloses such an arrangement.[11]

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[10] *BASCOM Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016)

[11] We note that the Specification discloses that "[i]n an alternative embodiment, database 120 is stored remotely from server system 112 and may be non-centralized." Spec. ¶ 36. But that feature is not recited in the

As to the argument that the customer profile represents a usage pattern specific to a subdivision of a business entity, Appellants have not adequately explained how this provides "a technology-based solution" that improves the performance of the computer system itself, like the "ordered combination" in *BASCOM*. *See BASCOM*, 827 F.3d at 1351. Rather, as evidenced by the Specification, the argued improvements lie in the content of the information stored.[12]

Appellants' argument that "[c]laim 1 includes specific, detailed recitations that leave open numerous other avenues for tailoring rewards program and other marketing information to customers" is likewise unpersuasive of Examiner error (Reply Br. 3). Although the Supreme Court has described "the concern that drives [the exclusion of abstract ideas from patent eligible subject matter] as one of pre-emption," *Alice Corp.*, 573 U.S. at 216, characterizing preemption as a driving concern for patent eligibility

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claims and, therefore, cannot be relied on to provide an inventive concept. *See Accenture Glob. Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1345 (Fed. Cir. 2013) ("[T]he complexity of the implementing software or the level of detail in the specification does not transform a claim reciting only an abstract concept into a patent-eligible system or method."); *see also Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1322 (Fed. Cir. 2016) ("The district court erred in relying on technological details set forth in the patent's specification and not set forth in the claims to find an inventive concept." (citing *Accenture*, 728 F.3d at 1345, and *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass'n*, 776 F.3d 1343, 1346 (Fed. Cir. 2014))).

[12] *See, e.g.*, Spec. ¶ 119 ("Using the above described embodiments to generate profiles, or customer-level summaries capturing a 'profile' of a transaction card's state allows an entity to obtain a rich summary of spending behavior at a merchant partner. Such spend behavior can span store departments or even SKU-level behavior.")

is not the same as characterizing preemption as the sole test for patent eligibility. "The Supreme Court has made clear that the principle of preemption is the basis for the judicial exceptions to patentability" and "[f]or this reason, questions on preemption are inherent in and resolved by the § 101 analysis." *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (citing *Alice Corp.*, 134 S. Ct. at 2354). "[P]reemption may signal patent ineligible subject matter, [but] the absence of complete preemption does not demonstrate patent eligibility." *Id.*

Finally, Appellants misapprehend the controlling precedent to the extent that Appellants maintain that the claims are patent-eligible, i.e., that the claims recite additional elements that are not well-known, routine, and conventional, because the claims allegedly are novel and/or non-obvious in view of the prior art (*see, e.g.*, App. Br. 15 ("Claim 9, for example, include types of data received and utilized in generating an improved customer profile. These types of data are <u>not</u> conventionally obtained for use in customer profile management as evidenced <u>by the lack of cited references</u> put forth by the Office"); *id.* at 16 ("The claimed customer profile is further improved over any profile generated by known methods because it is clustered with similar customer profiles using a multi-dimensional Euclidean space. [13] This step provides significantly more than any abstract idea. Additionally, the Examiner cites not a single previous court decision or prior

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[13] Although Appellants do not specify claim numbers, we understand this argument to be addressed to dependent claims 10–12, which recite "a multi-dimensional Euclidean space."

art reference that would reference this inventive concept") [14]). Neither a finding of novelty nor a non-obviousness determination automatically leads to the conclusion that the claimed subject matter is patent-eligible. Although the second step in the *Mayo/Alice* framework is termed a search for an "inventive concept," the analysis is not an evaluation of novelty or non-obviousness, but rather, a search for "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.'" *Alice Corp.*, 573 U.S. at 217–18 (citation omitted). "Groundbreaking, innovative, or even brilliant discovery does not by itself satisfy the § 101 inquiry." *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 591 (2013). A novel and non-obvious claim directed to a purely abstract idea is, nonetheless, patent-ineligible. *See Mayo*, 566 U.S. at 90; *see also Diamond v. Diehr*, 450 U.S. 175, 188–89 (1981) ("The '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.").

We are not persuaded, on the present record, that the Examiner erred in rejecting claims 1–5, 7, and 9–39 under 35 U.S.C. § 101. Therefore, we sustain the Examiner's rejection.

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[14] We note that under the USPTO's 2019 Revised Guidance, there is no requirement that the Examiner cite to judicial decisions as evidence that the claims are directed to an abstract idea. *See* 84 Fed. Reg. at 51–54.

DECISION

The Examiner's rejection of claims 1–5, 7, and 9–39 under 35 U.S.C. § 101 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED