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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* RAJENDRA R. RANE and MELISSA SCHWARTZ

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Appeal 2017-003538  
Application 12/690,725<sup>1</sup>  
Technology Center 3600

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Before, JOSEPH A. FISCHETTI, BIBHU R. MOHANTY, and  
BART A. GERSTENBLITH, *Administrative Patent Judges*.

FISCHETTI, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants seek our review under 35 U.S.C. § 134 of the Examiner's final rejection of claims 1, 2, 4–13, 19, and 21–27. We have jurisdiction under 35 U.S.C. § 6(b).

SUMMARY OF DECISION

We AFFIRM.

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<sup>1</sup> Appellants identify III Holdings 1, LLC, as the real party in interest. App. Br. 3.

## THE INVENTION

Appellants state the “invention generally relates to using analytics and statistical analysis to categorize and draw inferences from data, and more particularly, to applying data collection, data aggregation, data clustering, and data appending, to spend level data in order to segment entities and draw inferences regarding those entities.” Specification ¶ 1.

Claim 1, reproduced below, is representative of the subject matter on appeal.

1. A method comprising:

receiving, by a computer system, spending data indicative of transactions by a plurality of entities with a plurality of merchants, wherein each of the plurality of merchants is associated with a merchant category code corresponding to a predominant business activity of that merchant;

assigning, by the computer system, a score to each of the plurality of entities with respect to one or more merchant category codes, wherein the score for that entity is determined based on the spending data of that entity within the one or more merchant category codes as compared to the spending data of others of the plurality of entities within the one or more merchant category codes;

determining, by the computer system, a cluster comprising a subset of the plurality of entities, wherein the determining is performed according to whether the respective assigned score for each of the plurality of entities falls within a selected range of scores for a selected merchant category code;

receiving, by the computer system, one or more criteria specifying a selectable ranking merchant threshold;

ranking, by the computer system, a subset of the plurality of merchants based on comparisons between individual ones of the subset of the plurality of merchants using portions of the spending data;

selecting, by the computer system, one or more particular merchants from the ranked subset of the plurality of merchants based on the respective rankings for the one or more particular merchants meeting the selectable ranking merchant threshold; and

transmitting, by the computer system, information that identifies the one or more particular merchants that were selected based on the selectable ranking merchant threshold.

### THE REJECTION

The following rejection is before us for review.

Claims 1, 2, 4–13, 19, and 21–27 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more.

### ANALYSIS

#### 35 U.S.C. § 101 REJECTION

We will sustain the rejection of claims 1, 2, 4–13, 19, and 21–27 under 35 U.S.C. § 101.

The Supreme Court:

set forth a framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts. First, . . . determine whether the claims at issue are directed to one of those patent-ineligible concepts. If so, we then ask, “[w]hat else is there in the claims before us?” To answer that question, . . . consider 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. [The Court] described step two of this analysis as 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.

*Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2355 (2014) (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72–73 (2012)).

To perform this test, we must first determine whether the claims at issue are directed to a patent-ineligible concept.

Although the Court in *Alice* made a direct finding as to what the claims were directed to, we find that this case's claims themselves and the Specification provide enough information to inform one as to what they are directed to.

The steps in claim 1 result in identifying: “one or more particular merchants that were selected based on the selectable ranking merchant threshold.”

The Specification states:

In one embodiment, a method and system for clustering entities (e.g., consumers) into groups using spend level data is disclosed. These clusters may be enriched with data known to a clustering host, or provided by one or more third parties. The clusters may be enriched with attribute, identification, preference, characteristic, demographic and/or other information. The enriched clusters may be analyzed and profile information of the clusters (e.g., aggregate cluster attributes, characteristics, demographics, and preferences) may be determined from the analysis. This profile information of the clusters may be used by the host and/or a third party such as a merchant and/or marketer. This profiled cluster information may be useful in matching entities with other entities, matching entities with merchants, matching merchants with entities, and matching merchant with other merchants.

Specification ¶ 21. Thus, this evidence shows that claim 1 is directed to clustering consumers into groups using spending level data scoring. It follows from prior Supreme Court cases, *Gottschalk v. Benson*, 409 U.S. 63 (1972), in particular, that the claims at issue here are directed to an abstract idea. Clustering consumers into groups using spending level data scoring is a fundamental economic practice of a transaction because matching customers with merchants is a basic strategy for sales. The patent-ineligible end of the 35 U.S.C. § 101 spectrum includes fundamental economic practices. *See Alice Corp. Pty. Ltd.*, 134 S. Ct. at 2355–57.

In addition, we find the steps of:

- i. assigning, a score to each of the plurality of entities with respect to one or more merchant category codes,
- ii. determining a cluster comprising a subset of the plurality of entities, wherein the determining is performed according to whether the respective assigned score for each of the plurality of entities falls within a selected range of scores for a selected merchant category code;
- iii. ranking a subset of the plurality of merchants based on comparisons between individual ones of the subset of the plurality of merchants using portions of the spending data; and
- iv. selecting one or more particular merchants from the ranked subset of the plurality of merchants based on the respective rankings for the one or more particular merchants meeting the selectable ranking merchant threshold,

constitute, “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.” *Electric Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016); *see also buySAFE, Inc.*

*v. Google, Inc.*, 765 F.3d 1350 (Fed. Cir. 2014) (claims directed to certain arrangements involving contractual relations are directed to abstract ideas). Thus, clustering consumers into groups using spending level data scoring is an “abstract idea” beyond the scope of § 101.

As in *Alice Corp. Pty. Ltd.*, we need not labor to delimit the precise contours of the “abstract ideas” category in this case. It is enough to recognize that there is no meaningful distinction in the level of abstraction between the concept of an intermediated settlement in *Alice* and the concept of clustering consumers into groups using spending level data scoring, at issue here. Both are squarely within the realm of “abstract ideas” as the Court has used that term. That the claims do not preempt all forms of the abstraction or may be limited to customer-merchant relationships, does not make them any less abstract. *See OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1360–61 (Fed. Cir. 2015).

The introduction of a computer into the claims does not alter the analysis at *Mayo* step two:

[T]he mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention. Stating an abstract idea “while adding the words ‘apply it’” is not enough for patent eligibility. Nor is limiting the use of an abstract idea “to a particular technological environment.” Stating an abstract idea while adding the words “apply it with a computer” simply combines those two steps, with the same deficient result. Thus, if a patent’s recitation of a computer amounts to a mere instruction to “implement[t]” an abstract idea “on . . . a computer,” that addition cannot impart patent eligibility. This conclusion accords with the preemption concern that undergirds our § 101 jurisprudence. Given the ubiquity of computers, wholly generic computer implementation is not generally the sort of “additional feature[e]” that provides any “practical assurance that the

process is more than a drafting effort designed to monopolize the [abstract idea] itself.”

*Alice Corp. Pty. Ltd.*, 134 S. Ct. at 2358 (alterations in original) (citations omitted). “[T]he relevant question is whether the claims here do more than simply instruct the practitioner to implement the abstract idea . . . on a generic computer.” *Id.* at 2359. They do not.

Taking the claim elements separately, the function performed by the computer at each step of the process is purely conventional. Using a computer to retrieve, select, and apply decision criteria to data amounts to electronic data query and retrieval—one of the most basic functions of a computer. All of these computer functions are well-understood, routine, conventional activities previously known to the industry. *See Elec. Power Grp. v. Alstom S.A.*, 830 F.3d 1350 (Fed. Cir. 2016); *see also In re Katz Interactive Call Processing Patent Litig.*, 639 F.3d 1303, 1316 (Fed. Cir. 2011) (“Absent a possible narrower construction of the terms ‘processing,’ ‘receiving,’ and ‘storing,’ . . . those functions can be achieved by any general purpose computer without special programming.”). In short, each step does no more than require a generic computer to perform generic computer functions. As to the data operated upon, “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.” *SAP Am., Inc. v. InvestPic, LLC*, 890 F.3d 1016, 1022 (Fed. Cir. 2018).

Considered as an ordered combination, the computer components of Appellants’ method add nothing that is not already present when the steps are considered separately. The sequence of data reception-analysis-access is equally generic and conventional or otherwise held to be abstract. *See*

*Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014) (sequence of receiving, selecting, offering for exchange, display, allowing access, and receiving payment recited an abstraction); *Inventor Holdings, LLC v. Bed Bath & Beyond, Inc.*, 876 F.3d 1372, 1378 (Fed. Cir. 2017) (sequence of data retrieval, analysis, modification, generation, display, and transmission); *Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC*, 874 F.3d 1329, 1339 (Fed. Cir. 2017) (sequence of processing, routing, controlling, and monitoring). The ordering of the steps is therefore ordinary and conventional.

Viewed as a whole, Appellants' claims simply recite the concept of clustering consumers into groups using spending level data scoring. The claims do not, for example, purport to improve the functioning of the computer itself. Nor do they effect an improvement in any other technology or technical field. Instead, the claims at issue amount to nothing significantly more than instructions to cluster consumers into groups using spending level data scoring. Under our precedents, that is not enough to transform an abstract idea into a patent-eligible invention. *See Alice Corp. Pty. Ltd.*, 134 S. Ct. at 2360.

The method claims do not, for example, purport to improve the functioning of the computer itself. Nor do they effect an improvement in any other technology or technical field. The Specification spells out different generic equipment and parameters that might be applied using this concept and the particular steps such conventional processing would entail based on the concept of information access under different scenarios. *See, e.g.*, Specification ¶ 40. The Specification does not describe any particular improvement in the manner a computer functions, at least with respect to the

claims in the instant application. Instead, the claims at issue amount to nothing significantly more than instructions to apply the abstract idea of information access using some unspecified, generic computer. Under our precedents, that is not enough to transform an abstract idea into a patent-eligible invention. *See Alice Corp. Pty. Ltd.*, 134 S. Ct. at 2360.

As to the structural claims, they:

are no different from the method claims in substance. The method claims recite the abstract idea implemented on a generic computer; the system claims recite a handful of generic computer components configured to implement the same idea. This Court has long “warn[ed] . . . against” interpreting § 101 “in ways that make patent eligibility ‘depend simply on the draftsman’s art.’”

*Id.* (alterations in original).

We have reviewed all the arguments Appellants have submitted concerning the patent eligibility of the claims before us that stand rejected under 35 U.S.C. § 101. Appeal Br. 10–16. We find that our analysis above substantially covers the substance of all the arguments that have been made. But, for purposes of completeness, we will address various arguments in order to make individual rebuttals of same.

Appellants argue:

In addressing claim 1 relative to the second portion of the *Alice* test, the Examiner merely states that claim performs the functions of ‘receiving, assigning, determining, ranking, selecting, and transmitting.’ Office Action at 4. Appellant submits that the Examiner is grossly simplifying the language of claim 1 in an attempt to minimize or obscure its actual limitations.

This pattern of reasoning is logically faulty, because any claim element is capable of being simplified or generalized to an arbitrary degree. Conclusions drawn from such a

simplification do not necessarily apply to the claim elements themselves, however. For example, innumerable operations that can be performed by a computer involve steps that include ‘receiving,’ ‘determining,’ or ‘transmitting,’ *see id.* When taken in a complete vacuum, such recitations might indeed be ‘well-understood, routine, and conventional,’ *see id.* However, the Examiner **does not establish** that the **particular** operations performed by a computer in claim 1 are routine or conventional. Put another way, the simplification process used by the Examiner by definition obscures the details of various claim features, which runs counter to *Alice’s* requirement to consider **the elements of the claims themselves**, and not simply unclaimed generalizations of those features.

Appeal Br. 11–12.

We disagree with Appellants. The Examiner found:

In the Final Office Action dated October 16, 2015, Examiner clearly asserted that the claims amounted to no more than a recitation of functions that are well-understood, routine, and conventional activities previously known to the pertinent industry (i.e. receiving, assigning, determining, ranking, selecting, and transmitting). The July 2015 Updated on Subject Matter Eligibility at page 7 clearly states “the courts have recognized the following computer functions to be well-understood, routine, and conventional functions when they are claimed in a merely generic manner:

performing repetitive calculations,

**receiving, processing, and storing data,**

electronically scanning or extracting data from a physical document,

electronic recordkeeping,

automating mental tasks, and

**receiving or transmitting data over a network**, e.g., using the Internet to gather data”. Therefore, claim 1 has been clearly established as merely reciting well-understood, routine, and conventional activities as set forth in the previous Office Action

dated October 16, 2015, recognized by the courts, and as clearly stated above.

Ans. 2–3.

We understand the Examiner, through citation to the July 2015 Update, to rely on prior court decisions finding that certain computer functions are well-understood, routine, and conventional functions. These prior court decisions adequately support this finding to satisfy the requirement to set forth a *prima facie* case of unpatentability under 35 U.S.C. § 101. Thus, we find the Examiner’s findings of generic nature of the component parts recited in the claims provides sufficient evidence of a generic computer system used to implement the abstraction. *See Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044, 1057 (Fed. Cir. 2017) (“Significantly, the claims do not provide details as to any non-conventional software for enhancing the financing process”). *See Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1342 (Fed. Cir. 2017) (explaining that “[o]ur law demands more” than claim language that “provides only a result-oriented solution, with insufficient detail for how a computer accomplishes it”).

Appellants argue:

**It is beyond dispute that rejections by the Office under Sections 102 and 35 U.S.C. § 103(a) would not be made absent any direct evidence.** Appellant submits that any determination under Section 101 must likewise be supported by evidence—particularly if it is alleged that the subject matter in question is, for example, a “fundamental,” “well understood, routine and conventional activities previously known to the industry.” No logically consistent rationale supports treating questions as to the prior art status of a claim feature differently under Section 101 than under Sections 102 and 103.

Appeal Br. 13.

We disagree with Appellants. In this regard, there is no requirement that examiners must provide evidentiary support in every case before a conclusion can be made that a claim is directed to an abstract idea. *See, e.g.*, MPEP 2106.07(a)(III) (2018) (“The courts consider the determination of whether a claim is eligible (which involves identifying whether an exception such as an abstract idea is being claimed) to be a question of law. Thus, the court does not require ‘evidence’ that a claimed concept is a judicial exception, and generally decides the legal conclusion of eligibility without resolving any factual issues.” (citations omitted.))

Appellants also argue:

Here, **no art-based rejections exist**. This fact is tantamount to an admission by the Examiner that the claims are not anticipated or rendered obvious by the prior art, and thus it cannot reasonably be asserted that the claims are directed to ‘fundamental,’ ‘well-understood, routine and conventional activities previously known to the industry.’ If this were the case, the Examiner surely would have also asserted Section 102 or Section 103 rejections.

Appeal Br. 13–14.

We disagree with Appellants. The question in step two of the *Alice* framework is not whether an additional feature is novel, but whether the implementation of the abstract idea involves “more than the performance of ‘well-understood, routine, [and] conventional activities previously known to the industry.’” *Content Extraction and Transmission LLC v. Wells Fargo Bank, Nat. Ass’n*, 776 F.3d 1343, 1347–48 (Fed. Cir. 2014) (quoting *Alice*, 134 S. Ct. at 2359).

Finally, Appellants argue that “the present system, similarly to the system in *BASCOM*, improves upon various aspects of prior art electronically implemented offer programs.” Reply Br. 3–4.

We disagree with Appellants. In *Bascom* the Court found that:

the claims of the ‘606 patent are directed to the abstract idea of filtering content, BASCOM has adequately alleged that the claims pass step two of *Alice*’s two-part framework. BASCOM has alleged that an inventive concept can be found in the ordered combination of claim limitations that transform the abstract idea of filtering content into a particular, practical application of that abstract idea.

*Bascom Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1352 (Fed. Cir. 2016). To the contrary, we found *supra*, that nothing in the claims before us passes step two of the *Alice* two-part test; namely, we found that when considered as an ordered combination, the computer components of Appellants’ claims add nothing that is not already present when the steps are considered separately.

#### CONCLUSIONS OF LAW

We conclude the Examiner did not err in rejecting claims 1, 2, 4–13, 19, and 21–27 under 35 U.S.C. § 101.

#### DECISION

The decision of the Examiner to reject claims 1, 2, 4–13, 19, and 21–27 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). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED