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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte GARY M. KATZ, RYAN CARR, and
ANGELA CLEMENS KIMES

Appeal 2018-004611
Application 14/075,773
Technology Center 3600

Before JENNIFER S. BISK, LARRY J. HUME, and
JULIET MITCHELL DIRBA, *Administrative Patent Judges*.

HUME, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant,¹ Catalina Marketing Corporation, appeals from the Examiner's decision rejecting claims 1, 3–10, 12, 13, 15–22, 24, and 25, which are all claims pending in the application. Appellant has canceled claims 2, 11, 14, and 23. Final Act. 2. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as Catalina Marketing Corporation by way of the assignment recorded at Reel 033438, Frame 0539. Br. 3.

STATEMENT OF THE CASE²

The Invention

The claims are directed to a system and method for providing relative price point incentives based upon prior customer purchase behavior. *See* Spec. 1 (Title). In particular, Appellant’s disclosed embodiments and claimed invention relate to marketing, specifically, to the marketing of consumer goods. Spec. ¶ 2.

Exemplary Claim

Claim 1, reproduced below, is representative of the subject matter on appeal (*emphasis* added to contested prior-art limitations):

1. A computer-implemented method of generating price point based incentives to induce customers to purchase certain products, the method being implemented by a computer having one or more physical processors programmed with computer program instructions that, when executed, perform the method, the method comprising:

obtaining, by the computer, transaction data associated with a customer, wherein the transaction data comprises data acquired at one or more Point-of-Sale (POS) computer systems of one or more retailers, and indicates a plurality of items purchased by the customer within a product category;

identifying, by the computer, based on the transaction data, (i) a dominant competitive brand of a product in the

² Our decision relies upon Appellant’s Appeal Brief (“Br.,” filed Aug. 24, 2017); Examiner’s Answer (“Ans.,” mailed Dec. 21, 2017); Final Office Action (“Final Act.,” mailed Apr. 12, 2017); and the original Specification (“Spec.,” filed Nov. 8, 2013) (claiming benefit of PCT/US02/06861 filed Mar. 7, 2002). Appellant did not file a Reply Brief in response to the factual findings and legal conclusions in the Examiner’s Answer.

product category, and (ii) a client brand of the product, wherein the dominant competitive brand is a brand of product, other than the client brand, with the largest number of items purchased by the customer or the largest number of dollars of purchases by the customer according to the transaction data;

determining, by the computer, a category specific price point associated with the dominant competitive brand and the client brand, wherein the category specific price point is a difference in price between the dominant competitive brand and the client brand at which the customer is equally likely to purchase the dominant competitive brand or the client brand;

generating, by the computer, an incentive for said client brand based upon said category specific price point; and

transmitting, by the computer, the incentive for said client brand to the customer.

Prior Art

The Examiner relies upon the following prior art as evidence in rejecting the claims on appeal:

Swartz et al. (“Swartz”) US 2003/0132298 A1 July 17, 2003

Rejections on Appeal

R1. Claims 1, 3–10, 12–13, 15–22, and 24–25 stand 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. Final Act. 3.

R2. Claims 1, 3–10, 12–13, 15–22, and 24–25 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Swartz. Final Act. 15.

CLAIM GROUPING

Based on Appellant's arguments (Br. 9–23) and our discretion under 37 C.F.R. § 41.37(c)(1)(iv), we decide the appeal of patent-ineligible subject matter Rejection R1 of claims 1, 3–10, 12–13, 15–22, and 24–25 on the basis of representative claim 1; and we also decide the appeal of anticipation Rejection R2 of claims 1, 3–10, 12–13, 15–22, and 24–25 on the basis of representative claim 1.³

ISSUES AND ANALYSIS

In reaching this decision, we consider all evidence presented and all arguments actually made by Appellant. To the extent Appellant has not advanced separate, substantive arguments for particular claims, or other issues, such arguments are waived. 37 C.F.R. § 41.37(c)(1)(iv).

We disagree with Appellant's arguments with respect to claim 1 and, unless otherwise noted, we incorporate by reference herein and adopt as our own: (1) the findings and reasons set forth by the Examiner in the action from which this appeal is taken, and (2) the reasons and rebuttals set forth in the Examiner's Answer in response to Appellant's arguments. We highlight and address specific findings and arguments regarding claim 1 for emphasis as follows.

³ “Notwithstanding any other provision of this paragraph, the failure of appellant to separately argue claims which appellant has grouped together shall constitute a waiver of any argument that the Board must consider the patentability of any grouped claim separately.” 37 C.F.R. § 41.37(c)(1)(iv). In addition, when Appellant does not separately argue the patentability of dependent claims, the claims stand or fall with the claims from which they depend. *In re King*, 801 F.2d 1324, 1325 (Fed. Cir. 1986).

1. § 101 Rejection R1 of Claims 1, 3–10, 12, 13, 15–22, 24, and 25

Issue 1

Appellant argues (Br. 9–20) the Examiner’s rejection of claim 1 under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter is in error. These contentions present us with the following issue:

Under the USPTO’s Revised Guidance, informed by our governing case law concerning 35 U.S.C. § 101, is claim 1 patent-ineligible under § 101?

Principles of Law

A. 35 U.S.C. § 101

An invention is patent-eligible if it is a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101.⁴ However, the Supreme Court has long interpreted 35 U.S.C. § 101 to include implicit exceptions: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 70 (2012) (brackets in original) (citing *Diamond v. Diehr*, 450 U.S. 175, 185 (1981)).

In determining whether a claim falls within an excluded category, we are guided by the Supreme Court’s two-step framework, described in *Mayo* and *Alice*. *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 217–18 (2014) (citing *Mayo*, 566 U.S. at 75–77). In accordance with that framework, we

⁴ This threshold analysis of whether a claim is directed to one of the four statutory categories of invention, i.e., a process, machine, manufacture, or composition of matter, is referred to as “*Step 1*” in the USPTO’s patent-eligibility analysis under § 101. MPEP § 2106.

first determine what concept the claim is “directed to.” *See Alice*, 573 U.S. at 219 (“On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk.”); *see also Bilski v. Kappos*, 561 U.S. 593, 611 (2010) (“Claims 1 and 4 in petitioners’ application explain the basic concept of hedging, or protecting against risk . . .”).

Concepts determined to be abstract ideas, and thus patent ineligible, include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)). Concepts determined to be patent eligible include physical and chemical processes, such as “molding rubber products” (*Diehr*, 450 U.S. at 191); “tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores” (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. 252, 267–68 (1853))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

In *Diehr*, the claim at issue recited a mathematical formula, but the Supreme Court held “[a] claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula.” *Diehr*, 450 U.S. at 187; *see also id.* at 191 (“We view respondents’ claims as nothing more than a process for molding rubber products and not as an attempt to patent a mathematical formula.”). Having said that, the Supreme Court also indicated that a claim “seeking patent protection for that formula in the abstract . . . is not accorded the protection of our patent laws, and this principle cannot be circumvented by attempting

to limit the use of the formula to a particular technological environment.” *Id.* (citation omitted) (citing *Benson* and *Flook*); *see, e.g., id.* at 187 (“It is now commonplace that an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.”).

Abstract ideas may include, but are not limited to, fundamental economic practices, methods of organizing human activities, and mathematical formulas or relationships. *Alice*, 573 U.S. at 217–21. Under this guidance, we must therefore ensure at step one that we articulate what the claims are directed to with enough specificity to ensure the step one inquiry is meaningful. *Id.* at 217 (“[W]e tread carefully in construing this exclusionary principle lest it swallow all of patent law.”).

If the claim is “directed to” an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, where “we must 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.” *Alice*, 573 U.S. at 221 (citation omitted). “A claim that recites an abstract idea must include ‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’” *Id.* (alterations in original) (quoting *Mayo*, 566 U.S. at 77). “[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention.” *Id.*

B. USPTO Revised Guidance

The PTO recently published revised guidance in the Federal Register concerning the application of § 101. *2019 Revised Patent Subject Matter*

Eligibility Guidance, 84 Fed. Reg. 50 (January 7, 2019) (hereinafter “Revised Guidance”) (<https://www.govinfo.gov/content/pkg/FR-2019-01-07/pdf/2018-28282.pdf>).

Under the Revised Guidance, we first look to whether the claim recites:

(1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity such as a fundamental economic practice, or mental processes);⁵ and

(2) additional elements that integrate the judicial exception into a practical application (*see* Manual for Patent Examining Procedure (“MPEP”) §§ 2106.05(a)–(c), (e)–(h)).⁶
See Revised Guidance 52–53.

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look to whether the claim:

(3) adds a specific limitation beyond the judicial exception that is not “well-understood, routine, conventional” in the field (*see* MPEP § 2106.05(d)); or

(4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.⁷
See Revised Guidance 56.

⁵ Referred to as “*Revised Step 2A, Prong 1*” in the Revised Guidance (hereinafter “*Step 2A(i)*”).

⁶ Referred to as “*Revised Step 2A, Prong 2*” in the Revised Guidance (hereinafter “*Step 2A(ii)*”).

⁷ Items (3) and (4) continue to be collectively referred to as “*Step 2B*” of the Supreme Court’s two-step framework, described in *Mayo* and *Alice*.

Step 2A(i) – Abstract Idea

Informed by our judicial precedent, the Revised Guidance extracts and synthesizes key concepts identified by the courts as abstract ideas to explain that the abstract idea exception includes the following groupings of subject matter, when recited as such in a claim limitation:

(a) Mathematical concepts—mathematical relationships, mathematical formulas or equations, mathematical calculations;

(b) Certain methods of organizing human activity — fundamental economic principles or practices (including hedging, insurance, mitigating risk); commercial or legal interactions (including agreements in the form of contracts; legal obligations; advertising, marketing or sales activities or behaviors; business relations); managing personal behavior or relationships or interactions between people (including social activities, teaching, and following rules or instructions); and

(c) Mental processes—concepts performed in the human mind (including an observation, evaluation, judgment, opinion).

Revised Guidance 52 (footnotes omitted).

Under the Revised Guidance, if the claim does not recite a judicial exception (a law of nature, natural phenomenon, or subject matter within the enumerated groupings of abstract ideas above), then the claim is patent-eligible at *Step 2A(i)*. This determination concludes the eligibility analysis, except in situations identified in the Revised Guidance.⁸

⁸ In the rare circumstance in which an examiner believes a claim limitation that does not fall within the enumerated groupings of abstract ideas should nonetheless be treated as reciting an abstract idea, the procedure described in of the Guidance for analyzing the claim should be followed. *See* Revised Guidance, Section III.C.

However, if the claim recites a judicial exception (i.e., an abstract idea enumerated above, a law of nature, or a natural phenomenon), the claim requires further analysis for a practical application of the judicial exception in *Step 2A(ii)*.

Step 2A(ii) – Practical Application

If a claim recites a judicial exception in *Step 2A(i)*, we determine whether the recited judicial exception is integrated into a practical application of that exception in *Step 2A(ii)* by: (a) identifying whether there are any additional elements recited in the claim beyond the judicial exception(s); and (b) evaluating those additional elements individually and in combination to determine whether they integrate the exception into a practical application.

The seven identified “practical application” sections of the MPEP,⁹ cited in the Revised Guidance under *Step 2A(ii)*, are:

- (1) MPEP § 2106.05(a) Improvements to the Functioning of a Computer or To Any Other Technology or Technical Field
- (2) MPEP § 2106.05(b) Particular Machine
- (3) MPEP § 2106.05(c) Particular Transformation
- (4) MPEP § 2106.05(e) Other Meaningful Limitations
- (5) MPEP § 2106.05(f) Mere Instructions To Apply An Exception

⁹ See MPEP §§ 2106.05(a)–(c), (e)–(h). Citations to the MPEP herein refer to revision [R-08.2017]. Sections 2106.05(a), (b), (c), and (e) are indicative of integration into a practical application, while §§ 2106.05(f), (g), and (h) relate to limitations that are not indicative of integration into a practical application.

- (6) MPEP § 2106.05(g) Insignificant Extra-Solution Activity
- (7) MPEP § 2106.05(h) Field of Use and Technological Environment

See Revised Guidance 55.

If the recited judicial exception is integrated into a practical application as determined under one or more of the MPEP sections cited above, then the claim is not directed to the judicial exception, and the patent-eligibility inquiry ends. *See Revised Guidance 54.* If not, then analysis proceeds to *Step 2B*.

Step 2B – “Inventive Concept” or “Significantly More”

Under our reviewing courts’ precedent, it is possible that a claim that does not “integrate” a recited judicial exception under *Step 2A(ii)* is nonetheless patent eligible. For example, the claim may recite additional elements that render the claim patent eligible even though one or more claim elements may recite a judicial exception.¹⁰ The Federal Circuit has held claims eligible at the second step of the *Alice/Mayo* test (USPTO *Step 2B*) because the additional elements recited in the claims provided “significantly more” than the recited judicial exception (e.g., because the additional elements were unconventional in combination).¹¹ Therefore, if a claim has been determined to be directed to a judicial exception under *Revised Step 2A*, we must also evaluate the additional elements individually and in combination under *Step 2B* to determine whether they provide an inventive

¹⁰ *See, e.g., Diehr*, 450 U.S. at 187.

¹¹ *See, e.g., Amdocs (Israel), Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1300, 1304 (Fed. Cir. 2016); *BASCOM Global Internet Services, Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1349–52 (Fed. Cir. 2016); *DDR Holdings v. Hotels.com, L.P.*, 773 F.3d 1245, 1257–59 (Fed. Cir. 2014).

concept (i.e., whether the additional elements amount to significantly more than the exception itself).¹²

Under the Revised Guidance, we must consider in *Step 2B* whether an additional element or combination of elements: (1) “Adds a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field, which is indicative that an inventive concept may be present;” or (2) “simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception, which is indicative that an inventive concept may not be present.” *See* Revised Guidance, Section III.B.¹³

In the *Step 2B* analysis, an additional element (or combination of elements) is not well-understood, routine or conventional unless the

¹² The patent eligibility inquiry may contain underlying issues of fact. *Mortg. Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1325 (Fed. Cir. 2016). In particular, “[t]he question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018).

¹³ In accordance with existing *Step 2B* guidance, an Examiner’s finding that an additional element (or combination of elements) is well understood, routine, conventional activity must be supported with at least one of the four specific types of evidence required by the USPTO *Berkheimer* Memorandum, as shown above. For more information concerning evaluation of well-understood, routine, conventional activity, *see* MPEP § 2106.05(d), as modified by the USPTO *Berkheimer* Memorandum (USPTO Commissioner for Patents Memorandum dated Apr. 19, 2018, “Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*)” (hereinafter “*Berkheimer Memo*”).

examiner finds an evidentiary basis, and expressly supports a rejection in writing with, one or more of the following:

1. A citation to an express statement in the specification or to a statement made by an applicant during prosecution that demonstrates the well-understood, routine, conventional nature of the additional element(s). . . .
2. A citation to one or more of the court decisions discussed in MPEP § 2106.05(d)(II) as noting the well-understood, routine, conventional nature of the additional element(s).
3. A citation to a publication that demonstrates the well-understood, routine, conventional nature of the additional element(s). . . .
4. A statement that the examiner is taking official notice of the well-understood, routine, conventional nature of the additional element(s). . . .

See Berkheimer Memo 3–4.

If the Examiner or the Board determines under *Step 2B* that the element (or combination of elements) amounts to significantly more than the exception itself, the claim is eligible, thereby concluding the eligibility analysis.

However, if a determination is made that the element and combination of elements do not amount to significantly more than the exception itself, the claim is ineligible under *Step 2B*, and the claim should be rejected for lack of subject matter eligibility.

Analysis

Step 1 – Statutory Category

Claim 1, as a method (process) claim, recites one of the enumerated categories of eligible subject matter in 35 U.S.C. § 101. Therefore, the issue before us is whether it is directed to a judicial exception without significantly more.

Step 2A(i): Does the Claim Recite a Judicial Exception?

The Examiner determined that claim 1 is directed to “[d]iscounting based on competitor brand pricing [which] is ‘An Idea “Of Itself” (previously indicated by ‘steps can be performed mentally’) and/or one of ‘Certain Methods of Organizing Human Activity’ (previously indicated by reference to ‘Freddie Mac’), and thus the claims are directed to an abstract idea.” Final Act. 3.

We conclude claim 1 does not recite the judicial exceptions of either natural phenomena or laws of nature. We evaluate, *de novo*, whether claim 1 recites an abstract idea based upon the Revised Guidance.

With respect to this phase of the analysis, Appellant argues:

[T]he Office Action fails to identify any similar abstract idea that has been held patent ineligible. *See* May 19, 2016 Memo Re Subject Matter Eligibility (“when determining whether a claim is directed to an abstract idea, it is appropriate to compare the claim to claims already found to be directed to an abstract idea in a previous court decision.”); May 2016 Update: Memorandum — Formulating a Subject Matter Eligibility Rejection and Evaluating the Applicant’s Response to a Subject Matter Eligibility Rejection (“the rejection should explain why [the alleged abstract idea] corresponds to a concept that the courts have identified as an abstract idea” The Office

Action identifies the subject matter of *Electric Power*, *Affinity Labs*, and the non-precedential *Freddie Mac* as a similar concept to the claims. Office Action, p.3. Appellant respectfully disagree[s].

Br. 15–16. Appellant further argues, unlike the three decisions cited by the Examiner in the Final Action (3), “Appellant[’s claims] recite[] ‘generating, by the computer, an incentive for said client brand based upon said category specific price point’. Appellant respectfully submit[s] that Appellant’[s] claims, which include ‘generating, by the computer, an incentive for said client brand based upon said category specific price point’, are not directed to a similar abstract idea as any of the claims of the decisions referenced above.” Br. 17.

First, we look to the Specification to provide context as to what the claimed invention is directed to. In this case, the Specification discloses that the invention “relates to the field of marketing. More specifically, this invention relates to the field of marketing consumer goods.” Spec. ¶ 2. Also, “[t]he present inventors recognize that the data stored in some [point-of-sale] POS computer systems can beneficially be used to determine purchase incentives that would induce customers to purchase certain products.” Spec. ¶ 5.

Appellant’s Abstract describes the invention as follows:

The invention provides a system, computer program, and method for generating price point based incentives comprising determining a category specific price point (620) associated with a dominant competitive brand and a client brand; and generating an incentive (630) for said client brand based upon said price point and an anticipated price differential (640).

Spec. 15 (Abstract).

In TABLE 1 below, we identify in *italics* the specific claim limitations that we conclude recite an abstract idea. We additionally identify in **bold** the additional (non-abstract) claim limitations that we find to be generic computer components and techniques, and underline limitations we conclude represent extra-solution activity:

TABLE 1

Independent Claim 1	Revised Guidance
<p>A computer-implemented method of generating price point based incentives to induce customers to purchase certain products, the method being implemented by a computer having one or more physical processors programmed with computer program instructions that, when executed, perform the method, the method comprising:</p>	<p>A process (method) is a statutory subject matter class. <i>See</i> 35 U.S.C. § 101.</p>
<p>[1] <u>obtaining</u>, by the computer, <u>transaction data</u> associated with a customer, wherein the transaction data comprises data acquired at one or more Point-of-Sale (POS) computer systems of one or more retailers, and indicates a plurality of items purchased by the customer within a product category;</p>	<p>Receiving or obtaining information, i.e., data gathering or acquisition, is merely insignificant extra-solution activity that does not add significantly more to the abstract idea to render the claimed invention patent-eligible. Revised Guidance 55, n.31; <i>see In re Bilski</i>, 545 F.3d 943, 962 (Fed. Cir. 2008) (<i>en banc</i>), <i>aff'd on other grounds</i>, 561 U.S. 593 (2010) (“[T]he involvement of the machine or transformation in the claimed process must not merely be insignificant extra-solution activity”).</p>

Independent Claim 1	Revised Guidance
<p>[2] <i>identifying</i>, by the computer, based on the transaction data, (i) a dominant competitive brand of a product in the product category, and (ii) a client brand of the product, wherein the dominant competitive brand is a brand of product, other than the client brand, with the largest number of items purchased by the customer or the largest number of dollars of purchases by the customer according to the transaction data;</p>	<p>“Identifying” is an abstract idea, i.e., an “observation, evaluation, judgment, opinion” which could be performed as a mental process. See Revised Guidance 52.</p>
<p>[3] <i>determining</i>, by the computer, a category specific price point associated with the dominant competitive brand and the client brand, wherein the category specific price point is a difference in price between the dominant competitive brand and the client brand at which the customer is equally likely to purchase the dominant competitive brand or the client brand;</p>	<p>“Determining” is an abstract idea, i.e., an “observation, evaluation, judgment, opinion” which could be performed as a mental process. See Revised Guidance 52.</p>
<p>[4] <i>generating</i>, by the computer, <u>an incentive</u> for said client brand based upon said category specific price point; and</p>	<p>Generating an incentive based upon previously determined information is insignificant extra-solution activity. Revised Guidance 55, n.31.</p>

Independent Claim 1	Revised Guidance
[5] <u>transmitting</u> , by the computer, <u>the incentive</u> for said client brand to the customer.	Communicating or transmitting information is insignificant post-solution activity. Revised Guidance 55, n.31; <i>see also</i> MPEP § 2106.05(g); <i>and see buySAFE, Inc. v. Google, Inc.</i> , 765 F.3d 1350, 1355 (Fed. Cir. 2014) (computer receives and sends information over a network).

Claims App.

Under the broadest reasonable interpretation standard,¹⁴ we conclude limitations [1] through [5] recite steps that would ordinarily occur when generating price point based incentives to induce customers to purchase certain products. *See* Final Act. 3 *et seq.* For example, obtaining transaction data and associating the transaction data with a customer, and then determining price points pertaining to a dominant competitive brand and the client’s brand are steps that would ordinarily be carried out when ascertaining incentives for a client brand to be presented to the customer, whether initiated person-to-person, on paper, or using a computer.

¹⁴ During prosecution, claims must be given their broadest reasonable interpretation when reading claim language in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). Under this standard, we interpret claim terms using “the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant’s specification.” *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

We determine that claim 1, overall, recites certain methods of organizing human activity in the form of a commercial interaction, including marketing or sales behaviors that may also be performed by pen and paper. This type of activity, i.e., generating price point based incentives, as recited in claim 1, for example, and aside from any computer-related aspects, includes longstanding conduct that existed well before the advent of computers and the Internet, and could be carried out by a human with pen and paper. *See CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1375 (Fed. Cir. 2011).¹⁵

Thus, under *Step 2A(i)*, we agree with the Examiner that claim 1’s “method of generating price point based incentives to induce customers to purchase certain products” recites a judicial exception. We conclude claim 1, under our Revised Guidance, recites a judicial exception of generating price point based incentives, i.e., certain methods of organizing human activity in the form of a commercial interaction, including marketing or sales behaviors, and thus is an abstract idea.

¹⁵ Our reviewing court recognizes that “[a]n abstract idea can generally be described at different levels of abstraction.” *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016). That need not and, in this case does not, “impact the patentability analysis.” *Id.* at 1241. Further, “[t]he Board’s slight revision of its abstract idea analysis does not impact the patentability analysis.” *Id.* Moreover, merely combining several abstract ideas does not render the combination any less abstract. *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017) (“Adding one abstract idea (math) to another abstract idea . . . does not render the claim non-abstract.”); *see also FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093–94 (Fed. Cir. 2016) (determining the pending claims were directed to a combination of abstract ideas).

Step 2A(ii): Judicial Exception Integrated into a Practical Application?

If the claims are directed to a judicial exception, as we conclude above, we proceed to the “practical application” *Step 2A(ii)* in which we determine whether the recited judicial exception is integrated into a practical application of that exception by: (a) identifying whether there are any additional elements recited in the claim beyond the judicial exception(s); and (b) evaluating those additional elements individually and in combination to determine whether they integrate the exception into a practical application.

As to the specific limitations, we find limitations [1] (“obtaining . . . data”), [4] (“generating . . . an incentive”) and [5] (“transmitting . . . the incentive”) recite insignificant extra solution activity. The Supreme Court guides that the “prohibition against patenting abstract ideas ‘cannot be circumvented’ [by] adding ‘insignificant postsolution activity.’” *Bilski*, 561 U.S. at 610–11 (quoting *Diehr*, 450 U.S. at 191–92). On this record, we are of the view that Appellant’s claims do not operate the recited generic computer components in an unconventional manner to achieve an improvement in computer functionality. *See* MPEP § 2106.05(a).

In addition to the abstract steps recited in limitations [2] (“identifying . . . a dominant competitive brand of a product . . . [and] a client brand of the product”), and [3] (“determining . . . a category specific price point associated with the dominant competitive brand and the client brand”) identified in Step 2A(i), *supra*, and the extra and post-solution activity recited by limitations [1], [4], and [5], we conclude claim 1 does not further recite limitations that integrate the judicial exception of generating price

point based incentives into a practical application as determined under one or more of the MPEP sections cited above.

Under analogous circumstances, the Federal Circuit has held that “[t]his is a quintessential ‘do it on a computer’ patent: it acknowledges that [such] data . . . was previously collected, analyzed, manipulated, and displayed manually, and it simply proposes doing so with a computer. We have held such claims are directed to abstract ideas.” *Univ. of Fla. Research Found., Inc. v. Gen. Elec. Co.*, 916 F.3d 1363, 1367 (Fed. Cir. 2019); *see also Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1351 (Fed. Cir. 2016) (“Though lengthy and numerous, the claims do not go beyond requiring the collection, analysis, and display of available information in a particular field, stating those functions in general terms, without limiting them to technical means for performing the functions that are arguably an advance over conventional computer and network technology.”).

Therefore, the claim as a whole merely uses instructions to implement the abstract idea on a computer or, alternatively, merely uses a computer as a tool to perform the abstract idea. Thus, on this record, Appellant has not shown an improvement or practical application under the guidance of MPEP section 2106.05(a) (“Improvements to the Functioning of a Computer or to Any Other Technology or Technical Field”) or section 2106.05(e) (“Other Meaningful Limitations”). Nor does Appellant advance any arguments in the Brief(s) that are directed to the *Bilski* machine-or-transformation test, which would only be applicable to the method (process) claims on appeal. *See* MPEP §§ 2106.05(b) (Particular Machine) and 2106.05(c) (Particular Transformation).

Therefore, we conclude the abstract idea is not integrated into a practical application, and thus the claim is directed to the judicial exception.

Step 2B – “Inventive Concept” or “Significantly More”

If the claims are directed to a judicial exception, and not integrated into a practical application, as we conclude above, we proceed to the “inventive concept” step. For *Step 2B* we must “look with more specificity at what the claim elements add, in order to determine ‘whether they identify an “inventive concept” in the application of the ineligible subject matter’ to which the claim is directed.” *Affinity Labs*, 838 F.3d at 1258.

In applying step two of the *Alice* analysis, our reviewing court guides we must “determine whether the claims do significantly more than simply describe [the] abstract method” and thus transform the abstract idea into patentable subject matter. *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014). We look to see whether there are any “additional features” in the claims that constitute an “inventive concept,” thereby rendering the claims eligible for patenting even if they are directed to an abstract idea. *Alice*, 573 U.S. at 221. Those “additional features” must be more than “well-understood, routine, conventional activity.” *Mayo*, 566 U.S. at 79.

Limitations referenced in *Alice* that are not enough to qualify as “significantly more” when recited in a claim with an abstract idea include, as non-limiting or non-exclusive examples: adding the words “apply it” (or an equivalent) with an abstract idea¹⁶; mere instructions to implement an

¹⁶ *Alice*, 573 U.S. at 221–23.

abstract idea on a computer¹⁷; or requiring no more than a generic computer to perform generic computer functions that are well-understood, routine and conventional activities previously known to the industry.¹⁸

With respect to this step of the analysis,¹⁹ Appellant argues, “[c]laim 1 recites additional elements that amount to significantly more than the judicial exception. . . . [because] the pending claims do not preempt all uses of the alleged abstract idea.” Br. 17. Appellant further argues:

[E]xample Claim 1 relates to a genus for “generating price point based incentives to induce customers to purchase certain products”, and the incorporation of at least the limitation of “generating, by the computer, an incentive for said client brand based upon said category specific price point”, improves any existing process for “generating price point based incentives to induce customers to purchase certain products” and does not preempt all techniques for “generating price point based incentives to induce customers to purchase certain products” that use different techniques. The specific limitations of exemplary independent Claim 1 would prevent broad preemption of all methods for “generating price point based incentives to induce customers to purchase certain products”.

Br. 19.

Regarding preemption, “[w]hile preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility. . . . Where a patent’s claims are deemed only

¹⁷ *Alice*, 573 U.S. at 222–23, *e.g.*, simply implementing a mathematical principle on a physical machine, namely a computer.

¹⁸ *Alice*, 573 U.S. at 225 (explaining using a computer to obtain data, adjust account balances, and issue automated instructions involves computer functions that are well-understood, routine, conventional activities).

¹⁹ Typically, we see arguments pertaining to lack of preemption applied to analysis under *Alice Step 2A*.

to disclose patent ineligible subject matter under the *Mayo* framework, as they are in this case, preemption concerns are fully addressed and made moot.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015); *see also OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362–63 (Fed. Cir. 2015) (“that the claims do not preempt all price optimization or may be limited to price optimization in the e-commerce setting do not make them any less abstract”). Thus, we do not find Appellant’s argument concerning lack of preemption to be persuasive of subject matter eligibility.

Evaluating representative claim 1 under step 2 of the *Alice* analysis, we conclude it lacks an inventive concept that transforms the abstract idea of generating price point based incentives into a patent-eligible application of that abstract idea.

The patent eligibility inquiry may contain underlying issues of fact. *Mortg. Grader*, 811 F.3d at 1325. In particular, “[t]he question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact.” *Berkheimer*, 881 F.3d at 1368.

As evidence of the conventional nature of the recited “computer having one or more physical processors programmed with computer program instructions” and “Point-of-Sale (POS) computer systems” in method claim 1, the Specification discloses:

POS systems typically include a database management system including a product price look-up table which is accessed by the POS terminal during a transaction. POS systems retrieve to the POS terminal data defining the prices of items for which a

consumer requests purchase. POS systems total the costs for all of those items. POS systems log the purchase of the items. Some POS systems log the purchase of items in transaction records also including a unique customer identification (CID) associating that CID with the items purchased, the price of the items purchased, and the quantity of each product item purchased, the date of purchase, and the lane (POS terminal identification) in which the purchase occurred.

Spec. ¶4. In addition, the Specification discloses, “[e]ach of the aforementioned computer systems preferably includes at least one digital processor and hardware for inputting and outputting data and inputting control signals.” Spec. ¶ 20.

Thus, because the Specification describes the additional elements in general terms, without describing the particulars, we conclude the claim limitations may be broadly but reasonably construed as reciting conventional computer components and techniques, particularly in light of Appellant’s Specification, as quoted above.²⁰

The MPEP, based upon our precedential guidance, provides additional considerations with respect to analysis of the well-understood, routine, and conventional nature of the recited computer-related components.

Another consideration when determining whether a claim recites significantly more than a judicial exception is whether the additional elements amount to more than a recitation of the words “apply it” (or an equivalent) or are more than mere instructions to implement an abstract idea or other exception on a computer. As explained by the Supreme Court, in order to transform a judicial exception into a patent-eligible application,

²⁰ Claim terms are to be given their broadest reasonable interpretation, as understood by those of ordinary skill in the art and taking into account whatever enlightenment may be had from the Specification. *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

the additional element or combination of elements must do “more than simply stat[e] the [judicial exception] while adding the words ‘apply it’”. *Alice Corp. v. CLS Bank*, 573 U.S. ___, 134 S. Ct. 2347, 2357, 110 USPQ2d 1976, 1982-83 (2014) (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72, 101 USPQ2d 1961, 1965). Thus, for example, claims that amount to nothing more than an instruction to apply the abstract idea using a generic computer do not render an abstract idea eligible. *Alice Corp.*, 134 S. Ct. at 2358, 110 USPQ2d at 1983. *See also* 134 S. Ct. at 2389, 110 USPQ2d at 1984 (warning against a § 101 analysis that turns on “the draftsman’s art”)

In *Alice Corp.*, the claim recited the concept of intermediated settlement as performed by a generic computer. The Court found that the recitation of the computer in the claim amounted to mere instructions to apply the abstract idea on a generic computer. 134 S. Ct. at 2359-60, 110 USPQ2d at 1984. The Supreme Court also discussed this concept in an earlier case, *Gottschalk v. Benson*, 409 U.S. 63, 70, 175 USPQ 673, 676 (1972), where the claim recited a process for converting binary-coded decimal (BCD) numerals into pure binary numbers. The Court found that the claimed process had no substantial practical application except in connection with a computer. *Benson*, 409 U.S. at 71-72, 175 USPQ at 676. The claim simply stated a judicial exception (e.g., law of nature or abstract idea) while effectively adding words that “apply it” in a computer. *Id.*

MPEP § 2106.05(f) (“Mere Instructions To Apply An Exception”).

With respect to the *Step 2B* analysis, we conclude, similar to *Alice*, the recitation of a “computer-implemented method of generating price point based incentives to induce customers to purchase certain products” that includes “a computer having one or more physical processors programmed with computer program instructions” and “Point-of-Sale (POS) computer systems” (claim 1), is simply not enough to transform the patent-ineligible

abstract idea here into a patent-eligible invention under *Step 2B*. *See Alice*, 573 U.S. at 221 (“[C]laims, which merely require generic computer implementation, fail to transform [an] abstract idea into a patent-eligible invention.”).

Therefore, in light of the foregoing, we conclude, under the Revised Guidance, that Appellant’s claim 1, considered as a whole, is directed to a patent-ineligible abstract idea that is not integrated into a practical application and does not include an inventive concept. Accordingly, we sustain the Examiner’s § 101 rejection of independent claim 1, and grouped claims 3–10, 12, 13, 15–22, 24, and 25 which fall therewith. *See Claim Grouping, supra*.

2. § 102(b) Rejection R2 of Claims 1, 3–10, 12, 13, 15–22, 24, and 25

Issue 2

Appellant argues (Br. 21–23) the Examiner’s rejection of claim 1 under 35 U.S.C. § 102(b) as being anticipated by Schwarz is in error. These contentions present us with the following issue:

Did the Examiner err in finding the cited prior art discloses “[a] computer-implemented method of generating price point based incentives to induce customers to purchase certain products, the method being implemented by a computer having one or more physical processors programmed with computer program instructions that, when executed, perform the method,” wherein the method includes the steps of, *inter alia*, “

identifying . . . based on the transaction data, (i) a dominant competitive brand of a product in the product category, and (ii) a client brand of the product, wherein the dominant competitive brand is a brand of product, other than

the client brand, with the largest number of items purchased by the customer or the largest number of dollars of purchases by the customer according to the transaction data;

determining, by the computer, a category specific price point associated with the dominant competitive brand and the client brand, wherein the category specific price point is a difference in price between the dominant competitive brand and the client brand at which the customer is equally likely to purchase the dominant competitive brand or the client brand[,]

as recited in claim 1?

Analysis

Appellant generally contends “Swartz does not teach or suggest at least the above-referenced limitations of the independent claims.” Br. 22.

Appellant further argues:

Swartz is directed to “a consumer interactive shopping and marketing system” In brief, Swartz discloses “records in [a customer profile] database may include products that are “linked” to other products”, “a product price sensitivity factor [that] relates to whether the customer has purchased the product at full price or at a discount”, “maintain[ing] information about the circumstances of a particular customer purchasing products on a specific date”, and “us[ing] a rules based algorithm that utilizes prior shopping history to target specific messages to specific customers”. Swartz does not, however, teach or suggest the [contested] limitations of independent Claim 1.

Br. 22.

“identifying” Limitation

The Examiner cites Swartz for disclosing the contested “identifying” limitation by the teaching of “brand and discount sensitivity.” Final Act. 16–17 (citing Swartz ¶¶ 79–81).

In the Brief, Appellant reproduces a summary of the disclosure of Swartz (cited above), and then merely quotes the claim language, without offering further distinction. Br. 23.

Such statements are not considered to be arguments. 37 C.F.R. § 41.37(c)(1)(iv) (“A statement which merely points out what a claim recites will not be considered an argument for separate patentability of the claim.”); *In re Lovin*, 652 F.3d 1349, 1357 (Fed. Cir. 2011) (“[W]e hold that the Board reasonably interpreted Rule 41.37 to require more substantive arguments in an appeal brief than a mere recitation of the claim elements and a naked assertion that the corresponding elements were not found in the prior art.”). Thus, we do not find Appellant’s arguments to be persuasive.

Nonetheless, the Examiner responds in the Answer by finding:

So the issue is whether Swartz discloses identifying a dominant competitive brand and a client brand, and determines a category specific price point as a difference in price between the competitive and client brands. A “client brand” is any brand associated with an incentive program (see Appellant ¶ 0051), where a/the “dominant competitive brand” is any other brand “with the largest number of items purchased . . . or the largest number of dollars of purchases”, per the claims (see also Appellant ¶ 0055). Swartz discloses a series of databases and entries reflecting products and customers, including the product type, characteristics, price, promotions, competitive alternatives, etc. (see Swartz Figs. 16, 17, and 18) and customer transaction histories and analysis (see Swartz Figs. 19, 20, and 21). The customer transaction data is tracked with granularity to the brand level, such as, e.g., “purchasing a certain brand rye bread each time”, “always buys a certain brand of aspirin”, “only buy a certain brand of cola when it is on sale” (Swartz at 0079), and “‘learn’ what products or types of products a customer typically purchases” (Swartz at 0191), which indicates

tracking the dominant brand in a category for a customer as claimed.

Ans. 12. We agree with the Examiner’s analysis under the broadest reasonable interpretation standard.²¹ We further note Appellant does not rebut the Examiner’s findings by filing a Reply Brief.

Therefore, we agree with the Examiner’s finding that Swartz discloses the contested “identifying” limitation, as recited in claim 1.

“determining” Limitation

The Examiner cites Swartz for disclosing the contested “determining” limitation by the teaching of “utilizing prior history to target specific messages, and 0193, ‘the system may offer a big discount on brand Y to entice the customer to switch brands’.” Final Act. 17 (citing Swartz ¶¶ 79, 81, 189–197, emphasizing ¶¶ 191 and 193).

In the Brief, Appellant again merely provides a summary of Swartz’s asserted teachings and quotes the claim language, without offering further distinction. Br. 23.

Similar to the contested “identifying” limitation above, we do not find such generalized assertions to be persuasive. *See Lovin*, 652 F.3d at 1357.

²¹ During prosecution, claims must be given their broadest reasonable interpretation when reading claim language in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). Under this standard, we interpret claim terms using “the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant’s specification.” *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

Therefore, based upon the findings above, on this record, we are not persuaded of error in the Examiner’s reliance on the cited prior art to disclose the disputed limitations of claim 1, nor do we find error in the Examiner’s resulting finding of anticipation.

Accordingly, we sustain the Examiner’s anticipation rejection of independent claim 1, and grouped claims 3–10, 12, 13, 15–22, 24, and 25 which fall therewith. *See* Claim Grouping, *supra*.

CONCLUSIONS

(1) Under our Revised Guidance, governed by relevant case law, claims 1, 3–10, 12, 13, 15–22, 24, 25 are patent-ineligible under 35 U.S.C. § 101, and we sustain the rejection.

(2) The Examiner did not err with respect to anticipation Rejection R2 of claims 1, 3–10, 12, 13, 15–22, 24, 25 under 35 U.S.C. § 102(b), and we sustain the rejection.

DECISION SUMMARY

Claims Rejected	35 U.S.C. §	Basis / Reference	Affirmed	Reversed
1, 3–10, 12, 13, 15–22, 24, 25	101	Subject Matter Eligibility	1, 3–10, 12, 13, 15–22, 24, 25	
1, 3–10, 12, 13, 15–22, 24, 25	102(b)	Anticipation / Schwarz	1, 3–10, 12, 13, 15–22, 24, 25	
Overall Outcome			1, 3–10, 12, 13, 15–22, 24, 25	

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FINALITY AND RESPONSE

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). *See* 37 C.F.R. § 41.50(f).

AFFIRMED