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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* KEVIN DETRICK

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Appeal 2018-002334  
Application 14/267,465  
Technology Center 3600

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Before BRADLEY W. BAUMEISTER, SHARON FENICK, and  
RUSSELL E. CASS, *Administrative Patent Judges*.

FENICK, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant<sup>1</sup> appeals from the Examiner's decision to reject claims 1–29. *See* Appeal Br. 7.<sup>2</sup> We have jurisdiction under 35 U.S.C. § 6(b)(1). We AFFIRM.

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<sup>1</sup> We use the word Appellant to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Innovative Control Systems, Inc. Appeal Brief (“Appeal Br.,” filed June 12, 2017) 3.

<sup>2</sup> This Decision refers to Appellant's Appeal Brief and Reply Brief (“Reply Br.,” filed December 28, 2017), the Examiner's Final Office Action (“Final

### CLAIMED SUBJECT MATTER

The claims are directed providing car wash services where pricing is determined based in part on factors assessed in relation to, for example, a current wait time based on a queue length for a specific service or the availability of crews to perform services. Spec. ¶ 16. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A method of operating a flex service car wash comprising:
  - a) providing a first computer terminal at which a vehicle customer can purchase a car wash and at least one additional service, such as a hand finishing service, to be provided after receiving the car wash;
  - b) determining a projected length of a queue for the at least one additional service at the time a customer purchases a car wash;
  - c) calculating a price for the at least one additional service based on the projected length of the queue and making the at least one additional service available for purchase at the price on the first computer terminal;
  - d) providing a purchased car wash including providing the at least one additional service if selected by the customer for the price based on the projected length of the queue,wherein the projected length of the queue is for a time following the provision of the purchased carwash.

Appeal Br. 17 (Claims Appendix).

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Act.,” mailed October 13, 2016 ) and Answer (“Ans.,” mailed November 2, 2017), and the original Specification (“Spec.,” filed May 1, 2014).

## REFERENCES

The Examiner relies upon the following prior art:

Name	Reference	Date
Elliott	US 6,366,220 B1	Apr. 2, 2002
Ringdahl et al. (“Ringdahl”)	US 2006/0144430 A1	July 6, 2006
Ferrara et al. (“Ferrara”)	US 7,778,937 B2	Aug. 17, 2010
Dube et al. (“Dube”)	US 8,284,924 B2	Oct. 9, 2012

## REJECTIONS

Claims 1–29 are rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more. Final Act. 2–5.

Claims 1–11, 17–28 and 29 are rejected under 35 U.S.C. § 103 as being unpatentable over Ringdahl, Dube, and Ferrara. Final Act. 6–22.

Claims 12–16 and 27–29 are rejected under 35 U.S.C. § 103 as being unpatentable over Ringdahl, Dube, Ferrara, and Elliott. Final Act. 23–28.

## PRINCIPLES OF LAW RELATING TO PATENT ELIGIBILITY UNDER 35 U.S.C. § 101

### *I. SECTION 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.

However, the U.S. 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. *E.g., Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014).

In determining whether a claim falls within an excluded category, we are guided by the Court’s two-step framework, described in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66

(2012), and *Alice*. *Alice*, 573 U.S. at 217–18 (citing *Mayo*, 566 U.S. at 75–77). In accordance with that framework, we 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” (*Diamond v. Diehr*, 450 U.S. 175, 191 (1981)); “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 Court held that “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 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.* (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.”).

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 (internal quotation marks 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.*

## II. USPTO SECTION 101 GUIDANCE

In January of 2019, the United States Patent and Trademark Office (“USPTO”) published revised guidance on the application of § 101, which was updated in October 2019. USPTO, *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50 (Jan. 7, 2019) (“2019 Guidance”); October 2019 Update: Subject Matter Eligibility, 84 Fed. Reg. 55942 (available at the USPTO’s website) (“October 2019 PEG Update”). Under the 2019 Guidance, we first look to whether the claim recites the following:

- (1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of

organizing human activities such as a fundamental economic practice, or mental processes); and

(2) additional elements that integrate the judicial exception into a practical application (*see* MPEP §§ 2106.05(a)–(c), (e)–(h)).

2019 Guidance, 84 Fed. Reg. at 52–55.

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.

2019 Guidance, 84 Fed. Reg. at 56.

## ANALYSIS

### *I. THE 101 REJECTION*

#### *A. The Examiner’s Rejection and Appellant’s Contentions*

In the Final Office Action, the Examiner rejects claims 1–29 under 35 U.S.C. § 101 as directed to non-statutory subject matter. Final Act. 2–5. The Examiner determines that claim 1 recites an abstract idea in the form of the steps of “determining a projected length of a queue for the at least one additional service at the time a customer purchases a car wash,” “calculating a price for the at least one additional service based on the projected length of the queue and making the at least one additional service available for purchase,” and pricing a service “based on the projected length of the

queue,” and additionally finds an abstract idea in the claim limitation that “the projected length of the queue is for a time following the provision of the purchased carwash.” *Id.* at 3–4; Ans. 3–4.

The Examiner determines, *inter alia*, that these steps are similar to organizing, storing, and transmitting information, or comparing new and stored information and using rules to identify options. Final Act. 3–4 (citing *Cyberfone Systems, LLC v. CNN Interactive Group, Inc.*, 558 Fed. Appx. 988 (Fed. Cir. 2014) and *SmartGene, Inc. v Advanced Biological Labs.*, 555 Fed. Appx. 950 (Fed. Cir. 2014)). The Examiner additionally finds that the method of claim 1 comprises “routine data gathering” to determine the price of a service. *Id.* at 5 (citing *Elec. Power Group v. Alstom S.A.*, 830 F.3d 1350 (Fed. Cir. 2016)).

The Examiner determines that the additional limitations of the “first computer terminal,” in claim 1, and the “computer terminal,” in claim 2, (which depends from claim 1 and adds the limitation that the terminal be automated), do not improve another technology or technical field, improve the functioning of a computer itself, add a specific limitation other than what is well-understood, routine, and conventional, or add meaningful limitations that amount to more than generally linking the use of the exception to a particular technological environment. *Id.* at 4–5.

Appellant argues that the claims are patentable because they “provide a particular method for pricing, selling, and providing services over the course of the implementation claimed.” Appeal Br. 8. Appellant argues that “the method of claim 1 provides concrete steps for separately (1) determining a projected length of a queue for a time period following the provision of a carwash, (2) calculating a price based on a projected length of

a queue at that future time, (3) presenting the service for sale to a consumer for that calculated price, and then (4) providing the purchased car wash and additional service to the consumer.” *Id.*; Reply Br. 2.

Appellant further argues that the determination of a projected queue length is not an abstract idea, as it is based on an actual queue and a variety of supplemental factors, and specific data must be collected and transformed to arrive at the projection and for pricing the service according to that projection. *Id.* at 8–9. Appellant argues that because services are actually made available for purchase and provided, the claim considered as a whole is not abstract and the added limitations do significantly more than linking the use of the exception to a particular technological environment. *Id.* at 9–10.

Appellant argues that the Examiner does not properly address claim 18 or the claims that depend from claim 18. *Id.* at 8, 10. Appellant argues that claim 18’s additional computer-terminal and service-station limitations further support its arguments regarding the claimed system and method. *Id.* at 10.

*B. Analysis under Step 2A, Prong 1, of the 2019 Guidance*

Under Step 2A, Prong 1, of the 2019 Guidance, we first must determine whether the claim recites any judicial exception to patent eligibility. The 2019 Guidance identifies three judicially excepted groupings: (1) mathematical concepts, (2) certain methods of organizing human activity such as fundamental economic practices and managing interactions between people, and (3) mental processes. 2019 Guidance, 84 Fed. Reg. at 52–53.

Based on existing Supreme Court and Federal Circuit precedent, the 2019 Guidance has identified “certain methods of organizing human activity” that may constitute an abstract idea including, *inter alia*, “managing personal behavior or relationships or interactions between people (including social activities, teaching, and following rules or instructions).” *See* 2019 Guidance, 84 Fed. Reg. at 52. The 2019 Guidance also identifies “mental processes” as including “concepts performed in the human mind (including an observation, evaluation, judgment, opinion).” *Id.* (footnote omitted). The “mental processes” judicial exception also includes concepts that can be performed by a human with a pen and paper as well as those that can be performed entirely in the mind. *See* October 2019 PEG Update at 9 (“a claim that encompasses a human performing the step(s) mentally with the aid of a pen and paper recites a mental process”).

Claim 1, as drafted, recites steps for calculating a price for a service that can be performed between humans or in the human mind without the use of computers or other technological elements. These steps will be discussed in more detail below.

Claim 1, limitation (b), recites the step of “determining a projected length of a queue for the at least one additional service at the time a customer purchases a car wash” and the “wherein” clause of claim 1 further specifies that “the projected length of the queue is for a time following the provision of the purchased carwash.” This step can be performed in a number of ways by a person, such as by having a person see how many customers are in line or waiting for services to be provided at the time a customer’s service (such as a carwash) is likely to be completed, or evaluating current factors such as supply availability or worker availability

to estimate a queue length for an additional service at a future time. Such an evaluation may be based wholly or partly on historical data or experience. This step, therefore, can be carried out as a mental process.

Claim 1, limitation (c) recites, in part, the step of “calculating a price for the at least one additional service based on the projected length of the queue and making the at least one additional service available for purchase at the price.” A human can mentally provide a price for an additional service depending on the wait time for that service. This step, as well, can be carried out as a mental process.

Appellant argues that the claims do not recite a judicial exception that is analogous to those identified by the courts. Appeal Br. 9. As discussed above, however, the claim recites judicial exceptions in the form of mental steps and interactions between people, which the 2019 Guidance has identified as categories of abstract ideas based on Supreme Court and Federal Circuit precedent. *See* 2019 Guidance, 84 Fed. Reg. 52 nn.13–14 (citing cases involving mental steps and certain methods of organizing human activity including interactions between people).

For these reasons, we determine that claim 1 recites recognized judicial exceptions to patent eligibility. *See* 2019 Guidance, 84 Fed. Reg. at 52–53.

Appellant argues that claims 18–29 were not addressed by the Examiner. Appeal Br. 8, 10; Reply Br. 3. However, the Examiner specifically directs the rejection to “claims 1–29” and discusses the “claims” (plural) in the rejection. Final Act. 2–5, 29–31. Furthermore, claim 18 contains limitations substantially similar to those specifically addressed with respect to claim 1. *Id.* We, therefore, understand the Examiner to have

addressed the patentability of claims 1–29 in the rejection. Because independent claims 1 and 18 include similar limitations, we, therefore, agree that claim 18, and the claims dependent from claims 1 and 18, also recite judicial exceptions to patent eligibility.

*C. Analysis under Step 2A, Prong 2, of the 2019 Guidance*

Having determined that the claims recite a judicial exception, we next consider whether the claims recite “additional elements that integrate the [judicial] exception into a practical application.” *See* 2019 Guidance, 84 Fed. Reg. at 54; MPEP §§ 2106.05(a)–(c), (e)–(h). In this regard, the Supreme Court has held that one “cannot transform a patent-ineligible abstract idea into a patent-eligible invention” by “the mere recitation of a generic computer” or by “limiting the use of [the] abstract idea ‘to a particular technological environment.’” *Alice*, 573 U.S. at 223.

In addition to the steps discussed above that can be performed by a human in the mind or through interactions between people, claim 1 also recites “providing a first computer terminal at which a vehicle customer can purchase a car wash and at least one additional service, such as a hand finishing service, to be provided after receiving the car wash,” making the at least one additional service available for purchase at the price “on the first computer terminal,” and “providing a purchased car wash including providing the at least one additional service if selected by the customer for the price based on the projected length of the queue.”

The “computer terminal” limitation describes a generic computer component that amounts to mere instructions to implement the abstract idea on a computer, and therefore is not sufficient to make the claim patent eligible under Step 2B. *See Alice*, 573 U.S. at 226 (determining that the

claim limitations “data processing system,” “communications controller,” and “data storage unit” were generic computer components that amounted to mere instructions to implement the abstract idea on a computer); October 2019 PEG Update at 11–12 (recitation of generic computer limitations for implementing the abstract idea “would not be sufficient to demonstrate integration of a judicial exception into a practical application”).

The provision of a purchased car wash including the at least one additional service, as recited in claim 1’s limitation (d), constitutes insignificant extra-solution activity and only generally links the use of a judicial exception to a particular technological environment/field of use. “The notion that post-solution activity, no matter how conventional or obvious in itself, can transform an unpatentable principle into a patentable process exalts form over substance. A competent draftsman could attach some form of post-solution activity to almost any mathematical formula.” *Flook*, 437 U.S. at 590; *see also In re Brown*, 645 Fed. App’x 1014, 1016-1017 (Fed. Cir. 2016). As in *Flook*, so as not to “exalt[] form over substance,” we determine that the limitations on the use of the abstract idea to a specific field use (providing car wash services) cannot make the claim patent-eligible. *Flook*, 437 U.S. at 590. While Appellant argues that claim 1 provides “concrete steps for separately” performing the method steps, including the step of “providing the purchased car wash and additional service to the consumer,” this argument is not commensurate with the claim language, in which no additional concrete steps relating to the provision of the car wash services are recited.

Consequently, the additional limitations in the claims beyond the judicial exception do not serve to integrate the judicial exception into a

practical application within the meaning of step 2A, Prong 2, of the 2019 Guidance.

*D. Analysis under Step 2B*

Under Step 2B, we determine whether claim 1 includes additional elements individually or in combination that provide an inventive concept and, therefore, amount to significantly more than the exception itself. *See* 2019 Guidance, 84 Fed. Reg. at 56; *Alice*, 573 U.S. at 221. We agree with the Examiner that claim 1 does not include additional elements that provide any such “inventive concept,” and that the additional elements are “well-understood, routine, [or] conventional” in the field. *See* MPEP § 2106.05(d).

As discussed above with respect to Step 2A, Prong 2, the additional elements in claim 1 beyond the judicial exception are “providing a first computer terminal at which a vehicle customer can purchase a car wash and at least one additional service, such as a hand finishing service, to be provided after receiving the car wash,” making the at least one additional service available for purchase at the price “on the first computer terminal,” and “providing a purchased car wash including providing the at least one additional service if selected by the customer for the price based on the projected length of the queue.” As discussed above, these are simple generic computer elements or insignificant post-solution activity. As such, we agree with the Examiner that they are well-understood, routine, and conventional and are therefore insufficient to provide an “inventive concept” that amounts to significantly more than the abstract idea itself, and additionally determine that considering the elements of the claim as a whole, there is no inventive

concept which amounts to significantly more than the exception itself. *See* Final Act. 5–6.

Consequently, we agree with the Examiner that claim 1 is directed to patent-ineligible subject matter. The same is true of independent claim 18, which includes similar limitations as claim 1. We, therefore, sustain the rejection of independent claims 1 and 18, as well as the rejection of dependent claims 2–17 and 19–29, which are not argued separately.

## II. THE 103 REJECTION

The Examiner finds that the second part of limitation (c) of claim 1, “making the at least one additional service available for purchase at the price on the first computer terminal,” is taught in Ringdahl’s description of a messaging component in a car wash, which, in the time in which paid-for car wash services are “close to being finished” provides messages about an “add-on service” or “additional services” that are available to purchase. Ringdahl ¶ 39; Final Act. 7 (citing Ringdahl ¶ 39). The Examiner finds that the first part of this claim limitation, including the antecedent basis for “the price” in the second part, “calculating a price for the at least one additional service based on the projected length of the queue,” is taught by the combination of Dube and Ferrara. Final Act. 8–9.

Dube teaches queue monitoring, which allows a periodic award to a user waiting in a queue, and Ferrara teaches estimating a wait time for individuals seeking services at an establishment. *Id.* (citing Dube 3:45–58; Ferrara 4:15–20). The Examiner reasons that one of ordinary skill would have modified Dube with Ringdahl to “increase customer’s satisfaction for a service by rewarding a customer for waiting.” *Id.* at 8. The Examiner

further finds that one of ordinary skill would have further modified the combination of Ringdahl and Dube “in order to manage wait time in service transactions.” *Id.* at 9.

However, we agree with Appellant that “*Ringdahl* has no relevant “length of time” to modify . . . and has no reason to record such a length of time, because Ringdahl’s vending car wash control system functions as a “vending machine.” Appeal Br. 13; *see Ringdahl* ¶¶ 2 (“[o]ne widespread example of an automatic vending system is a car wash”), 3 (“[t]he car wash includes means to accept payment from a user of the car wash, in exchange for a certain amount of time that the car wash functions are dispensed, in one example”), 15, 33 (“payment may be made . . . prior to beginning the timer for car wash services to be dispensed [or the car wash] may also accept additional payments while the services are in progress and the timer is running down, to add additional service time”).

While the Examiner points to the option to purchase of an additional service when the initial service period is over, as Appellant notes, the additional service is available after the first car wash period. Therefore the teachings of Dube and Ferrara with respect to estimating a projected length of a queue and providing a reward or discount based on that projected length do not appear to be applicable to such additional purchases. The additional services all appear in the cited embodiment of Ringdahl to be related to products or services for a car that already is in a car wash bay (200 in Ringdahl) and the Examiner does not determine how the additional service would be one which would require a user to wait in a queue.

Additionally, if a calculation of a price for the at least one additional service was made based on the length of a queue, it is not clear why, in the

combination of Ringdahl, Dube, and Ferrara, it would be based on a projected length of the queue for the at least one additional service at the time the customer purchases a car wash, as per the claim limitation, rather than a projected or actual length of the queue for additional service(s) at the time the customer potentially purchases the additional service(s).

Accordingly, the Examiner has not established that the combination of Ringdahl, Dube, and Ferrara would have taught or suggested, at the time of the invention, “calculating a price for the at least one additional service based on the projected length of the queue and making the at least one additional service available for purchase at the price on the first computer terminal” where the projected length of the queue is determined “for the at least one additional service at the time a customer purchases a car wash.” We, therefore, reverse the Examiner’s rejection of claim 1 under Section 103. We also reverse the Section 103 rejection of independent claim 18, which includes similar limitations, and of dependent claims 2–11, 17, 19–26, and 29, rejected on the same basis.

With respect to the remaining rejections of dependent claims 12–16, 27, and 28, the Examiner does not rely on Elliot to cure the deficiency of the obviousness rejection explained above with respect to claim 1. Accordingly, we likewise reverse the Section 103 rejections of these dependent claims.

## CONCLUSION

We affirm the Examiner’s rejections of claims 1–29 under 35 U.S.C. § 101 as directed to non-statutory subject matter, and reverse the Examiner’s rejections of claims 1–29 as unpatentable under 35 U.S.C. § 103.

DECISION SUMMARY

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
1-29	101	Eligibility	1-29	
1-11, 17-26, 29	103	Ringdahl, Dube, Ferrara		1-11, 17-26, 29
12-16, 27, 28	103	Ringdahl, Dube, Ferrara, Elliot		12-16, 27, 28
<b>Overall Outcome:</b>			1-29	

TIME PERIOD FOR 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). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED