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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DOUGLAS RAYMOND MARTIN and
MARK ANTHONY ROCKWELL

Appeal 2018-007816
Application 14/703,950
Technology Center 3600

Before ADAM PYONIN, NABEEL U. KHAN, and
MICHAEL M. BARRY, *Administrative Patent Judges*.

KHAN, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1–20. 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 Ford Global Technologies, LLC. Appeal Br. 1.

CLAIMED SUBJECT MATTER

Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A system comprising:
a processor configured to:
receive a user-input destination;
receive advertiser selection criteria;
determine an advertiser route that includes an advertiser location, alternative to a fastest or shortest route to the destination, based on the advertiser selection criteria;
present the advertiser route to a vehicle occupant;
receive an occupant decision accepting or avoiding the advertiser route; and
augment an eventual trip cost based on the occupant decision.

REFERENCES

The prior art relied upon by the Examiner is:

Name	Reference	Date
Prada Gomez	US 8,630,897 B1	Jan. 14, 2014
O'Sullivan	US 8,660,894 B2	Feb. 25, 2014

REJECTIONS

1. Claims 1–20 stand rejected under 35 U.S.C. § 101 as directed to a judicial exception to patentable subject matter. Final Act. 3–6.
2. Claims 1–20 stand rejected under 35 U.S.C. § 103 as unpatentable over Prada Gomez and O'Sullivan. Final Act. 7–14.

OPINION

Rejection under 35 U.S.C. § 101

Legal Principles

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 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 Supreme Court’s two-step framework, described in *Mayo* and *Alice*. *Alice*, 573 U.S. at 217–18 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 75–77 (2012)). 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 Supreme 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 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.* (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 (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.* (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.*

The United State Patent and Trademark Office published revised guidance on the application of § 101 (*2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50 (Jan. 7, 2019)) (“2019 Guidance”) and recently, published an update to that revised guidance (*October 2019 Patent Eligibility Guidance Update*, 84 Fed. Reg. 55,942) (jointly referred to as “Guidance”). Under the Guidance, in determining whether a claim falls within an excluded category, we first look, under step 2A of the Guidance, 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); and
- (2) additional elements that integrate the judicial exception into a practical application (*see* MPEP §§ 2106.05(a)–(c), (e)–(h)).

See 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 move to step 2B of the Guidance and 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.

See 2019 Guidance 84 Fed. Reg. at 56.

Prong One of Step 2A

Under prong 1 of step 2A, we first look to whether the claim recites any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activities, or mental processes). 2019 Guidance, 84 Fed. Reg. at 52–54. To this end we note that claim 1 recites (1) “a processor configured to” (2) “receive user-input destination” (3) “receive advertiser selection criteria” (4) “determine an advertiser route that includes an advertiser location, alternative to a fastest or shortest route to the destination, based on the advertiser selection criteria,” (4) “present the advertiser route to a vehicle occupant,” (5) “receive an occupant decision accepting or avoiding the advertiser route” and (6) “augment an eventual trip cost based on the occupant decision.” Several of these limitations are directed to data gathering and calculating. For example, the limitations reciting “receiv[ing] user-input destination,” “receiv[ing] advertiser selection criteria,” and “receive an occupant decision accepting or avoiding the advertiser route” are data gathering steps that may be performed by the human mind. The limitation reciting “determin[ing] an advertiser route that includes an advertiser location, alternative to a fastest or shortest route to the destination, based on the advertiser selection criteria” is a step that requires calculating a route to a destination that includes a particular location along the way (the advertiser location). Such calculation of routes is a step that may be practically performed in the human mind. Similarly, the step of “augment[ing] an eventual trip cost based on the occupant decision” involves mathematical calculations that may be performed mentally by, for example, adding or subtracting a certain amount from a trip cost. *See Spec.* ¶¶ 42, 68.

Mental processes are a category of activities that the Guidance recognizes as constituting an abstract idea. *See* Guidance, 84 Fed. Reg. at 52. Thus, under prong one of step 2A we determine the claims recite an abstract idea.

Prong Two of Step 2A

Under prong 2 of step 2A of the Guidance we determine whether the claim as whole integrates the recited abstract idea into a practical application of the abstract idea. A claim that integrates a judicial exception into a practical application will apply, rely on, or use the judicial exception in a manner that imposes a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the judicial exception. To evaluate whether the claims integrate the abstract idea into a practical application, we identify whether there are any additional elements recited beyond the abstract idea, and evaluate those additional elements individually and in combination.

Some exemplary considerations laid out by the Supreme Court and the Federal Circuit indicate that an additional element that integrates an abstract idea into a practical application can include (i) an improvement in the functioning of a computer or to another technological field, (ii) an application of the judicial exception with, or by use of, a particular machine, (iii) a transformation or reduction of a particular article to a different state or thing, or (iv) a use of the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment. *See* MPEP § 2106.05(a)–(c), (e)–(h).

Reviewing the claim limitations as a whole, we determine the claim does not recite additional elements that integrate the abstract idea into a

practical application. In particular we find that the claim limitations do not improve the functioning of a computer or other technological field. Instead the technological elements of the claim simply link the mental processes to the technological environment of networks and computers.

The limitations that we did not identify above as reciting mental steps include the recited “processor,” and “present[ing] the advertiser route to a vehicle occupant.” As to the “processor,” neither the claim nor Specification indicate any improvements to the functioning of the processor. Instead, as claimed, the processor is used in its ordinary manner to receive inputs and perform calculations such as determining a route to a destination. The step of “present[ing] the advertiser route to a vehicle occupant” involves displaying to the user the result of determining a route to a destination which is directed to insignificant post-solution activity. *See Electric Power Group, LLC, v. Alstom*, 830 F.3d 1350, 1355 (Fed. Cir. 2016) (“[M]erely selecting information, by content or source, for collection, analysis, and display does nothing significant to differentiate a process from ordinary mental processes, whose implicit exclusion from § 101 undergirds the information-based category of abstract ideas”).

Appellant argues

the claim solves **the problem of getting a user to drive or use a route affiliated with one or more advertisers**, by supplementing or augmenting a cost associated with a ride if the advertiser-associated route is taken. Applicant is unaware of *any* instance where this was being done in 2015, and this *certainly* crosses the bar for “atypical” or “uncommon” solution.

Appeal Br. 6. Here we note that “getting a user to drive or use a route affiliated with one or more advertisers” refers to the abstract idea itself. An

abstract idea, even if novel, is still an abstract idea. Although in step 2B we search for an “inventive concept,” the analysis is not an evaluation of novelty or non-obviousness, but rather a search for ““an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.”” *Alice*, 573 U.S. at 217–18. A novel and nonobvious claim directed to a purely abstract idea is, nonetheless, patent-ineligible. *See Mayo*, 566 U.S. at 90.

Step 2B of the Guidance

Under step 2B of the Guidance we analyze the claims to determine whether they provide an inventive concept (i.e., whether the additional elements amount to significantly more than the exception itself). Considerations that are evaluated with respect to step 2B include determining whether the claims as a whole add a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field.

We determine that the claimed “processor” operates in a well-understood, routine, and conventional manner. For example, the Specification describes the processor as “control[ing] at least some portion of the operation of the vehicle-based computing system.” Spec. ¶ 17. The processor is connected to storage (Spec. ¶ 17), is connected to various input devices (Spec. ¶ 18), and outputs to a display and vehicle’s speakers (Spec. ¶ 19). We find this description to be consistent with the well-understood, routine, conventional uses of processors in modern day vehicles.

Accordingly, we sustain the Examiner’s rejection of independent claim 1 under 35 U.S.C. § 101, and also claims 2–14 and 16–21, for which

Appellant does not make any additional arguments. *See* Appeal Br. 13, 14, 18, 19.

Rejection under 35 U.S.C. § 103

Claim 1 recites “determine an advertiser route that includes an advertiser location, alternative to a fastest or shortest route to the destination, based on the advertiser selection criteria.” The Examiner finds Prada Gomez teaches the aforementioned disputed limitation. Final Act. 7 (citing Prada Gomez 8:25–33, 10:28–36); Ans. 5. Appellant argues that in Prada Gomez,

[t]here is no route that is an alternative to the fastest or shortest route to the destination in Prada Gomez, and there is not “avoidance” of the route (that is, the user can elect not to use the coupon, but this is not “avoiding” a particular route, this is avoiding the destination and offer entirely.)

Appeal Br. 7.

We are persuaded by Appellant’s arguments. Prada Gomez relates to “arranging for free or discounted transportation to an advertiser’s business location.” Prada Gomez, Abstract. Prada Gomez explains that advertisers may designate bids based on the cost of transporting a customer to their business. Prada Gomez, 8:17–19. Advertisers may place higher bids to provide customers with a shorter travel time, by for example, offering autonomous vehicle rides rather than public transportation rides. Prada Gomez, 8:15–33. We do not discern from this description that Prada Gomez teaches to “determine an advertiser route that includes an advertiser location, alternative to a fastest or shortest route to the destination, based on the advertiser selection criteria.” No alternative route is discussed in the relied upon sections of Prada Gomez. Additionally, claim 1 recites the “advertiser

location” as separate from the “destination.” In contrast, the Examiner improperly relies on Prada Gomez’s single “business location” for teaching both limitations. Ans. 5; *see Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1119 (Fed. Cir. 2004) (“[W]hen an applicant uses different terms in a claim it is permissible to infer that [the] different terms [] reflect a differentiation in the meaning of those terms.”); *Becton, Dickinson & Co. v. Tyco Healthcare Grp., LP*, 616 F.3d 1249, 1254 (Fed. Cir. 2010) (“Where a claim lists elements separately, ‘the clear implication of the claim language’ is that those elements are ‘distinct component[s]’ of the patented invention.” (alteration in original) (quoting *Gaus v. Conair Corp.*, 363 F.3d 1284, 1288 (Fed. Cir. 2004))).

Thus, we do not sustain the Examiner’s rejection of claims 1–20 under 35 U.S.C. § 103.

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–20	101	Eligibility	1–20	
1–20	103	Prada Gomez, O’Sullivan		1–20
Overall Outcome			1–20	

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).

Appeal 2018-007816
Application 14/703,950

AFFIRMED