



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/948,415	07/23/2013	Chad Evert Esselink	83375061	5718

28395 7590 04/29/2019
BROOKS KUSHMAN P.C./FGTL
1000 TOWN CENTER
22ND FLOOR
SOUTHFIELD, MI 48075-1238

EXAMINER

RUHL, DENNIS WILLIAM

ART UNIT	PAPER NUMBER
----------	--------------

3689

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

04/29/2019

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@brookskushman.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte CHAD EVERT ESSELINK, JEFFREY LEE HENTSCHEL,
CHAD CHRISTOPHER BOES, and ANDREW SHAFFER

Appeal 2018-002949
Application 13/948,415
Technology Center 3600

Before CAROLYN D. THOMAS, JOSEPH P. LENTIVECH, and
SCOTT RAEVSKY, *Administrative Patent Judges*.

LENTIVECH, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellants¹ appeal from the Examiner's decision to finally reject claims 1, 3–16, 19, and 20, the only claims pending in the application on appeal. Claims 2, 17, and 18 have been canceled. *See* App. Br. Claims Appendix. We have jurisdiction over the pending claims under 35 U.S.C. § 6(b).

We affirm.

¹ According to Appellants, the real party in interest is Ford Global Technologies, LLC. App. Br. 2.

STATEMENT OF THE CASE

Appellants' Invention

Appellants' invention generally relates to “a system and method for providing personalized dealership service to new and return customers.”

Spec. ¶ 10. Claim 1, which is illustrative, reads as follows:

1. A method comprising:

establishing communication between a vehicle and a computer located at an automobile dealership;

obtaining a position of the vehicle via a global positioning system; and

in response to the position being in proximity of the dealership, identifying a customer in a database corresponding to the vehicle and sending information to the vehicle that is personalized to the customer such that the vehicle causes the information to be output to the customer.

Rejections

Claims 1, 3–16, 19, and 20 stand rejected under 35 U.S.C. § 101 because the claimed subject matter is judicially-excepted from patent eligibility under § 101. Final Act. 2–11.

Claims 1, 3–16, 19, and 20 stand rejected under 35 U.S.C. § 103 as being unpatentable over the combination of Oesterling et al. (US 2005/0096020 A1; published May 5, 2005) (“Oesterling1”), Oesterling et al. (US 7,983,690 B2; issued July 19, 2011) (“Oesterling2”), and Shannon et al. (US 2014/0358727 A1; published Dec. 4, 2014) (“Shannon”). Final Act. 12–19.

ANALYSIS

Rejection under 35 U.S.C. § 101

Regarding the rejection of claims 1, 3–16, 19, and 20 under 35 U.S.C. § 101, Appellants do not substantively argue the claims separately, but instead rely on the same arguments for all claims. *See* App. Br. 3. In accordance with 37 C.F.R. § 41.37(c)(1)(iv), we select independent claim 1 as the representative claim. Remaining claims 3–16, 19, and 20 stand or fall together with claim 1.

PRINCIPLES OF LAW

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. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014) (internal quotation marks and citation omitted).

In determining whether a claim falls within an excluded category, we are guided by the Supreme Court’s two-step framework, described in *Mayo Collaborative Servs. v. Prometheus Labs., 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 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 (internal 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.* (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 PTO recently published revised guidance on the application of § 101. 2019 REVISED PATENT SUBJECT MATTER ELIGIBILITY GUIDANCE, 84 Fed. Reg. 50 (Jan. 7, 2019) (“Memorandum”). Under that 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); and
- (2) additional elements that integrate the judicial exception into a practical application (*see* MANUAL OF PATENT EXAMINING PROCEDURE (MPEP) §§ 2106.05(a)–(c), (e)–(h) (9th Ed., Rev. 08.2017, Jan. 2018)).

See Memorandum, 84 Fed. Reg. at 52, 54–55. 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.

See Memorandum, 84 Fed. Reg. at 56.

OUR ANALYSIS

At the outset, we note the Memorandum governs all patent-eligibility analysis under *Alice* and § 101 effective as of January 7, 2019. In particular, the PTO has acknowledged that the Federal Circuit’s common law, analogy-driven approach (a.k.a. “analogous claim” test) was effective soon after *Alice* was decided by the Supreme Court, but that approach has since become impractical as the growing body of Federal Circuit precedent has become increasingly more difficult for the Office and examiners to apply in a predictable manner. As a result, the PTO has synthesized, for purposes of clarity, predictability, and consistency, the “abstract idea” exception to include three categories of abstract ideas: (1) mathematical concepts—mathematical relationships, mathematical formulas or equations, mathematical calculations; (2) mental processes—concepts performed in the human mind (including an observation, evaluation, judgment, opinion); and (3) 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). *See* Memorandum, 84 Fed. Reg. at 54–55.

STEP 1

Under “Step 1” of the analysis, we determine whether the claimed subject matter falls within the four categories of patentable subject matter identified by 35 U.S.C. § 101. *Id.* at 53–54. Claim 1 is directed to a method and, therefore, falls within the four categories of patentable subject matter—a process.

STEP 2A, PRONG ONE

Under “*Step 2A[,]* Prong One” of the analysis, we determine whether the claim recites a judicial exception. *Id.* at 54. Claim 1 recites “obtaining a position of the vehicle via a global positioning system.” This limitation, as drafted, is a process that, under its broadest reasonable interpretation, covers performance of the limitation in the mind. For example, a person could use a GPS (global positioning system) to determine/observe the location of a vehicle and, thus, obtain the position of the vehicle via the GPS. *Cf. Versata Dev. Grp. V. SAP Am., Inc.*, 793 F.3d 1306, 1335 (Fed. Cir. 2015) (“Courts have examined claims that required the use of a computer and still found that the underlying, patent-ineligible invention could be performed via pen and paper or in a person’s mind.”). Thus, this limitation recites a mental process.

Claim 1 also recites “in response to the position being in proximity of the dealership, identifying a customer in a database corresponding to the vehicle and sending information to the vehicle that is personalized to the customer.” These limitations, under their broadest reasonable interpretation, recite at least commercial interactions akin to advertising, marketing, or sales activities because the limitations all recite operations that would ordinarily take place in an advertising/marketing environment such as a car

dealership. For example, a mechanic, when servicing a vehicle at a dealership, identifies a customer in a database corresponding to the vehicle as part of the service, and places information personalized to the customer (e.g., an oil change reminder sticker) in the vehicle.

According to Appellants' Specification, "[i]nformation that is personalized and sent to the customer is intended to enhance the customer experience with the dealership" (Spec. ¶ 25) and that "[f]or auto sales and service, dealerships desire to provide the best possible care to the customer so that the customer is satisfied and will return in the future" (Spec. ¶ 1). Thus, the recited advertising, marketing, or sales activities are "a fundamental economic practice long prevalent in our system of commerce" and "a building block of the modern economy." *Alice*, 573 U.S. at 219–20 (internal quotations and citation omitted). Therefore, these limitations recite an abstract idea, which we conclude is certain methods of organizing human activity—"a fundamental economic practice."

STEP 2A, PRONG TWO

Under "*Step 2A* . . . [,] Prong Two," we determine whether the claim as a whole integrates the recited judicial exception into a practical application of the exception. Memorandum, 84 Fed. Reg. at 54. Claim 1 recites the following additional element: "establishing communication between a vehicle and a computer located at an automobile dealership."

We find this additional limitation amounts to insignificant extra-solution activity and fails to integrate the recited judicial exceptions into a practical application. For example, the claim does not (1) improve the functioning of a computer or other technology, (2) is not applied with any

particular machine (except for a generic computer), (3) does not effect a transformation of a particular article to a different state, and (4) is not applied in any meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception. *See* Memorandum, 84 Fed. Reg. at 54–55; MPEP §§ 2106.05(a)–(c), (e)–(h). Instead, generic computer components, such as, for example, a computer, a global positioning system, and a database, are merely used as tools to facilitate the receiving of the claimed agreements and file record layouts. *See BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1348 (Fed. Cir. 2016).

We are not persuaded by Appellants’ argument that:

The claims represent an improvement to technological infrastructure used to control a vehicle. Once communication is established with the vehicle and certain trigger conditions are met (vehicle position being in proximity to a dealership), information is sent to the vehicle that causes the vehicle to output the information to a customer therein.

App. Br. 3. Initially, we note that Appellants fail to adequately explain how sending information to a vehicle that causes the vehicle to output the information to a customer therein improves a technological infrastructure used to control the vehicle. Further, Appellants’ argument overlooks that the argued “solution” must be a technical solution. Appellants’ argument does not explain how either the problem or solution are technical. Unlike the claims at issue in cases such as *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014) (claims at issue are “necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks”) and *Enfish, LLC v. Microsoft Corp.*, 822

F.3d 1327, 1339 (Fed. Cir. 2016) (claims at issue are “directed to a specific implementation of a solution to a problem in the software arts”), the claims here merely address a business challenge (*see* Spec. ¶ 25) through the use of generic, computer-related recitations that do not add meaningful limitations to steps otherwise directed to an abstract idea.

For the foregoing reasons, claim 1 is directed to a method of organizing human activity (e.g., a fundamental economic practice), i.e., an abstract idea, and does not integrate the judicial exception into a practical application.

STEP 2B

We next evaluate the claim under “*Step 2B*” to determine whether the claim provides an “inventive concept” (e.g., recites significantly more than the abstract idea). Memorandum, 84 Fed. Reg. at 56.

As recognized by the Memorandum, an “inventive concept” under *Alice* step 2 can be evaluated based on 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 (*see* MPEP § 2106.05(d)); 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 Memorandum, 84 Fed. Reg. at 56.

In this case, however, we find no element or combination of elements recited in Appellants' claim that adds a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field. *See id.*

Regarding the claimed computer, global positioning system, and database, we note that Appellants' Specification fails to distinguish such hardware from generic computer components, performing generic computer functions that are routine and conventional, i.e., the normal and basic functions of a computer. Accordingly, Appellants have not adequately explained how claim 1 is performed such that it is not a routine and conventional function of a generic computer.

As recognized by the Supreme Court, “the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.” *See Alice*, 573 U.S. at 223 (concluding claims “simply instruct[ing] the practitioner to implement the abstract idea of intermediated settlement on a generic computer” not patent eligible (*id.* at 225)); *see also Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715–16 (Fed. Cir. 2014) (claims merely reciting abstract idea of using advertising as currency as applied to a particular technological environment of the Internet not patent eligible); *Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1344–45 (Fed. Cir. 2013) (claims reciting “generalized software components arranged to implement an abstract concept on a computer” not patent eligible); and *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333–34 (Fed. Cir. 2012) (“[s]imply adding a ‘computer aided’ limitation to a claim covering an abstract concept, without more, is insufficient to render [a] claim patent eligible” (internal citation omitted)).

Because Appellants' independent claim 1 is directed to a patent-ineligible abstract concept, does not include additional elements that integrate the judicial exception into a practical application, and does not add a specific limitation beyond the judicial exception that is not "well-understood, routine, [and] conventional," we sustain the Examiner's rejection of the claims 1, 3–16, 19, and 20 under 35 U.S.C. § 101.

Rejection under 35 U.S.C. § 103

Appellants contend the Examiner erred in finding the combination of Oesterling1, Oesterling2, and Shannon teaches or suggests "in response to the position being in proximity of the dealership . . . sending information to the vehicle that is personalized to the customer such that the vehicle causes the information to be output to the customer," as recited in claim 1. App. Br. 3–4; Reply Br. 2–3. In particular, Appellants argue:

Oesterling[1] concerns a diagnostic process that is devoid of personalized information: Performing a diagnostic procedure on a vehicle has nothing to do with some type of personalized experience for a driver of the vehicle. And Shannon suggests that to the extent content for a customer is being sent to them, it should be sent to their cell phone or tablet, or some screen at a retail facility—none of which are a vehicle. As such, the examiner impermissibly relies on hindsight to suggest that technology concerning a vehicle diagnostic procedure (Oesterling[1]), which is not something that lends itself to being a personalized or interactive experience for a customer (or even something that really involves a customer), should be morphed into some type of personalized ad delivery service.

App. Br. 3–4; *see also* Reply Br. 2–3.

We do not find Appellants' arguments persuasive. We have reviewed the rejection for improper hindsight and find none. We conclude the Examiner's rejection takes into account only knowledge which was within

the level of ordinary skill in the art at the time the invention was made. *See In re McLaughlin*, 443 F.2d 1392, 1395 (CCPA 1971).

The Examiner finds Oesterling1 teaches “in response to the position being in proximity of [a vehicle service facility] . . . sending information to the vehicle . . . such that the vehicle causes the information to be output to the customer.” Final Act. 12–13 (citing Oesterling1 ¶¶ 2–4, 27, 30–32, 35). The Examiner finds Oesterling2 teaches detecting arrival of a vehicle at a car dealership. Final Act. 13 (citing Oesterling2 6:58–67, 7:15–22). The Examiner finds:

It would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to utilize Oesterling[1] at a car dealership (automobile dealership) where vehicles are sold and serviced. This would provide the advantages disclosed by Oesterling[1] for car dealerships.

Final Act. 13–14. The Examiner finds Shannon teaches sending targeted advertising content to a customer when a customer is detected at a retail establishment and, therefore, teaches or suggests sending information that is personalized to the customer, as required by claim 1. Final Act. 14–15 (citing Shannon ¶¶ 49, 63; Fig. 7). The Examiner finds it would be obvious to modify the teachings of Oesterling1 with the teachings of Shannon “to provide the customer with information that is *personalized* to the customer so that enhanced customer service can be provided, as is disclosed by Shannon.” Final Act. 15. As such, the Examiner has articulated a rational reason as to why it would be obvious to combine the teachings of the references. *See KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). Appellants provide no persuasive argument or evidence that combining the teachings of the references was “uniquely challenging or difficult for one of ordinary skill in the art.” *See Leapfrog Enters., Inc. v. Fisher-Price, Inc.*,

485 F.3d 1157, 1162 (Fed. Cir. 2007) (citing *KSR*, 550 U.S. at 419); *see also* *KSR*, 550 at 420–21 (skilled artisans can “fit the teachings of multiple patents together like pieces of a puzzle” because the skilled artisan is “a person of ordinary creativity, not an automaton”).

Accordingly, we are not persuaded the Examiner erred in rejecting claim 1, and claims 3–16, 19, and 20, which are not separately argued with particularity (*see* App. Br. 4), under 35 U.S.C. § 103.

DECISION

We affirm the Examiner’s rejection of claims 1, 3–16, 19, and 20 under 35 U.S.C. § 101.

We affirm the Examiner’s rejection of claims 1, 3–16, 19, and 20 under 35 U.S.C. § 103.

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

AFFIRMED