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EXAMINER

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte TODD BINION, STEVEN CIELOCHA,
SCOTT THOMAS CHRISTENSEN, GREGORY HAYWARD,
and CHRISTOPHER E. GAY

Appeal 2017–002726
Application 14/203,143¹
Technology Center 3600

Before ANTON W. FETTING, MICHAEL C. ASTORINO, and
ROBERT J. SILVERMAN, *Administrative Patent Judges*.
FETTING, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE²

Todd Binion, Steven Cielocha, Scott Thomas Christensen, Gregory
Hayward, and Christopher E. Gay (Appellants) seek review under
35 U.S.C. § 134 of a final rejection of claims 1, 2, 5–8, 11–14, and 17–24,

¹ The real party in interest is State Farm Mutual Automobile Insurance
Company. Br. 2.

² Our decision will make reference to the Appellants’ Appeal Brief (“Br.,”
filed June 7, 2016) and the Examiner’s Answer (“Ans.,” mailed November
17, 2016), and Final Action (“Final Act.,” mailed January 7, 2016).

the only claims pending in the application on appeal. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b).

We affirm.

The Appellants invented a way of establishing and using common driving routes for assessing, pricing, and provisioning of vehicle insurance. Specification para. 2.

An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below.

1. A computer implemented method for providing insurance, the method comprising:
 - receiving, via a computer network, vehicle data associated with a vehicle,
 - wherein the vehicle data includes at least a start point, an end point, and a frequency value;
 - determining, by one or more processors, a driving route including the start point and the end point based upon the vehicle data;
 - determining, by the one or more processors, that the driving route is a common driving route navigated more frequently than other driving routes included in the vehicle data based upon the frequency value;
 - determining, by the one or more processors, a parking location of the vehicle along the common route;
 - receiving, by the one or more processors, risk factor data indicating (i) one or more risk factors resulting from a length of the common route, (ii) one or more risk factors within the common route resulting from driving a vehicle along the common route, and (iii) one or more risk factors associated with the parking location;

assigning, by one or more processors, a risk score to each of the one or more risk factors as indicated by the risk factor data;

determining, by the one or more processors, a total risk score associated with the common driving route, the total risk score being based on a sum of risk scores assigned to each of the one or more risk factors;

and

calculating, by the one or more processors, an insurance premium price for a vehicle associated with the driving data based on the total risk score for the common driving route but not other driving routes included in the driving data besides the common driving route.

The Examiner relies upon the following prior art:

Hara	US 2006/0049925 A1	Mar. 9, 2006
Kortge	US 2006/0247852 A1	Nov. 2, 2006
Bogovich	US 8,606,512 B1	Dec. 10, 2013
Rowley	US 8,606,514 B2	Dec. 10, 2013
Cote	US 2014/0180723 A1	June 26, 2014
Yager	US 2014/0304011 A1	Oct. 9, 2014
Brinkmann	US 9,141,995 B1	Sept. 22, 2015

Claims 1, 2, 5–8, 11–14, and 17–24 stand rejected under 35 U.S.C.

§ 101 as directed to a judicial exception without significantly more.

Claims 1, 2, 5–8, 11–14, 17, and 18 stand rejected under 35 U.S.C.

§ 103(a) as unpatentable over Bogovich, Brinkmann, Rowley, Cote, and Hara.

Claims 19, 21, and 23 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Bogovich, Brinkmann, Rowley, Cote, Hara, and Kortge.

Claims 20, 22, and 24 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Bogovich, Brinkmann, Rowley, Cote, Hara, and Yager.

ISSUES

The issues of eligible subject matter turn primarily on whether the claims recite more than abstract conceptual advice of what a computer is to provide without implementation details.

The issues of obviousness turn primarily on whether the prior art finds a common route.

FACTS PERTINENT TO THE ISSUES

The following enumerated Findings of Fact (FF) are believed to be supported by a preponderance of the evidence.

Facts Related to the Prior Art

Bogovich

01. Bogovich is directed to using geographically encoded information to promote and/or reward risk mitigation. Bogovich 1:11–15.
02. Bogovich describes a personal navigation device receiving travel route information including a start location, end location, road-by-road directions, and/or turn-by-turn directions that uses the travel route information and mapping software to determine the road segment upon which the vehicle will travel, and retrieve the risk value for that road segment. For each subsequent road

segment remaining in the travel route, the personal navigation device retrieves the risk value for that road segment. The risk values retrieved for the travel route may be aggregated and a total risk value for the travel route may be sent. Bogovich 9:29–47.

03. Bogovich describes route-dependent pricing using route risk values to adjust insurance pricing based on where a vehicle is driven, adjusting the price quoted/charged for an insurance policy based on risk consumed. A vehicle/driver may be categorized into a risk class and charged for insurance accordingly. For example, the vehicle/driver may be provided with notification of a credit/debit if the vehicle consumed less/more, respectively, of risk at the end of a policy term than was initially purchased. Bogovich 14:18–32.

Brinkmann

04. Brinkmann is directed to evaluating one or more driving trips by a vehicle, identifying driving trip patterns, and performing risk analyses on the driving trips and patterns. Brinkmann 1:14–20.
05. Brinkmann describes retrieving available data for each risk factor identified by the driving analysis server to evaluate the risk and calculate a risk assessment value for each phase of the driving trip, or for the entire driving trip. This includes evaluating the parking risk of a driving trip associated with parking the vehicle during the driving trip. This parking risk assessment value may be calculated using the parking availability data for the destination location, the duration of time that the vehicle will be parked at the

destination location, and statistics regarding accidents, vehicle theft or vandalism, parking tickets and towing, and other stationary vehicle damage reports associated with the destination at the time that the vehicle was parked at the destination.

Brinkmann 14:5–41.

Rowley

06. Rowley is directed to providing a recommended route that takes current traffic conditions into account. Rowley 1:18–21.

07. Rowley describes identifying common paths for a particular event by identifying multiple identical paths to work and may also be determined only for characteristic points along the path. The presence or absence of commonality may be determined at various levels of granularity. Common paths may also be identified at a second event level. As one typical example, commonality could be discerned for all weekdays or for certain weekdays. The search for commonality may also occur in multiple orders. For example, all weekdays may be analyzed individually for commonality, and a common path may be discerned by applying rules to those days. Alternatively, as just described, trips for particular day may be analyzed, and a common trip for that day computed. Each of the daily common trips may then be compared for commonality. Rowley 5:64–6:32.

Cote

08. Cote is directed to monitoring, aggregating, analyzing, tabulating, graphing, mapping, and/or otherwise processing and/or presenting various characteristics of transportation segmentations. Cote para. 16.
09. Cote describes insurance products as including auto/motor insurance. Cote para. 18.
10. Cote describes a surface segment type map comprising location nodes connected surface segment types. The magnitude of the amount of time and/or distance (e.g., exposure) associated with a particular surface segment type may be represented. The expertise, experience, and/or training of a driver may also be considered with respect to determining frequencies, weighting factors, and/or risk factors descriptive of the use of the objects/vehicles. A customer and/or client or other driver that has a relatively high level of experience **driving on a certain surface segment type**, for example, despite and/or due to the frequency with which such surface segment type is realized by the driver, may be considered as a weighting factor such as in reducing the perceived and/or expected risk associated with the driver. Traversal of a surface segment type may be detected and/or inferred from sensor readings, such as provided by an on-board telematics device (e.g., the bumps associated with crossing a railway may be identified by a vehicle-related sensor, such as a shock sensor and/or accelerometer (built-in and/or of a mobile device such as a smart phone)). It may be determined that the

customer travels a route with some degree of relatively high frequency. Cote paras. 98–101.

Hara

11. Hara is directed to an anti-theft system for a vehicle. Hara para. 3.
12. Hara describes determining a security level based on the risk level of the theft, the user's schedule and the distance between the vehicles. In a case where the vehicle of the user is parked, the present location information, which is sensed by the GPS, of the vehicle is transmitted to the control center. The risk level of the theft at a parking region, which includes a present location of the vehicle, is calculated based on 1) a type of parking space, 2) an existence of a parking door, 3) an existence of a parking manager, 4) a distance from the past theft location and 5) a time when the vehicle is parked. Hara paras. 94–95.
13. Hara describes the risk level of the theft being changed with a parking location and surrounding environments even in the same region, such as a place around a police station, a home parking space and a corporate parking space. The risk level of the theft, which is determined based on a number of a past vehicle theft in a region is defined as a basic risk level of the theft. Then, a risk correction degree is determined based on a probability of theft happening to the vehicle according to a physical relationship with a facility in the region. Also a risk correction degree of a region, such as a monthly rental parking space and a region where houses

are sparse located, becomes +2, because a suspicious person is not checked adequately in the region. Then, the risk level of the theft is determined by adding the risk correction degree to the basic risk level of the theft. A final security level is determined based on the risk level of the theft, which is calculated by adding the risk correction degree to the pre-calculated basic risk level of the theft
Hara paras. 103–105.

ANALYSIS

Claims 1, 2, 5–8, 11–14, and 17–24 rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more

Method claim 1 recites receiving vehicle route data, determining a route, whether the route is common, and a parking location, receiving risk factor data, assigning risk scores, determining total risk score, and calculating an insurance premium. Thus, claim 1 recites receiving, analyzing, and generating data. None of the limitations recite implementation details for any of these steps, but instead recite functional results to be achieved by any and all possible means. Data reception, analysis and modification, and generation are all generic, conventional data processing operations to the point they are themselves concepts awaiting implementation details. The sequence of data reception-analysis-generation is equally generic and conventional. The ordering of the steps is therefore ordinary and conventional. The remaining claims merely describe calculation parameters, with no implementation details.

The Supreme Court

Set forth a framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts. First, [] determine whether the claims at issue are directed to one of those patent-ineligible concepts. [] If so, we then ask, “[w]hat else is there in the claims before us? [] To answer that question, [] consider the elements of each claim both individually and “as an ordered combination” to determine whether the additional elements “transform the nature of the claim” into a patent-eligible application. [The Court] described step two of this analysis as a search for an “‘inventive concept’”—*i.e.*, an element or combination of elements that is “sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.”

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

To perform this test, we must first determine whether the claims at issue are directed to a patent-ineligible concept. The Examiner finds the claims directed to calculating insurance price for a vehicle based on calculation of a total risk score. Final Act. 3.

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

The preamble to claim 1 recites that it is a method for providing insurance. The steps in claim 1 result in calculating an insurance premium price. The Specification at paragraph 2 recites that the invention relates to

establishing and using common driving routes for assessing, pricing and provisioning of vehicle insurance. Thus, all this evidence shows that claim 1 is directed to pricing insurance, i.e., insurance. This is consistent with the Examiner's finding.

It follows from prior Supreme Court cases, and *Bilski* (*Bilski v Kappos*, 561 U.S. 593 (2010)) in particular, that the claims at issue here are directed to an abstract idea. Like the risk hedging in *Bilski*, the concept of insurance is a fundamental economic practice long prevalent in our system of commerce. The use of insurance is also a building block of ingenuity in risk management. Thus, insurance, like hedging, is an “abstract idea” beyond the scope of § 101. See *Alice Corp. Pty. Ltd.*, 134 S. Ct. at 2356.

As in *Alice Corp. Pty. Ltd.*, we need not labor to delimit the precise contours of the “abstract ideas” category in this case. It is enough to recognize that there is no meaningful distinction in the level of abstraction between the concept of risk hedging in *Bilski* and the concept of insurance at issue here. Both are squarely within the realm of “abstract ideas” as the Court has used that term. See *Alice Corp. Pty. Ltd.*, 134 S. Ct. at 2357.

Further, claims reciting nothing more than data collection, analysis, and display are directed to an abstract idea. *Elec. Power Grp. v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (holding that “collecting information, analyzing it, and displaying certain results of the collection and analysis” are “a familiar class of claims ‘directed to’ a patent ineligible concept”); see also *In re TLI Commc'ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016); *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093–94 (Fed. Cir. 2016). Claim 1, unlike the claims found non-abstract in prior

cases, uses generic computer technology to perform data retrieval, analysis, and generation and does not recite an improvement to a particular computer technology. *See, e.g., McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314–15 (Fed. Cir. 2016) (finding claims not abstract because they “focused on a specific asserted improvement in computer animation”). As such, claim 1 is directed to the abstract idea of receiving, analyzing, and generating data.

The remaining claims merely describe calculation parameters. We conclude that the claims at issue are directed to a patent-ineligible concept.

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

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

Alice Corp. Pty. Ltd., 134 S. Ct. at 2358 (citations omitted).

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

Taking the claim elements separately, the function performed by the computer at each step of the process is purely conventional. Using a computer to receive, analyze, modify, and generate data amounts to electronic data query and retrieval—one of the most basic functions of a computer. All of these computer functions are well-understood, routine, conventional activities previously known to the industry. *See Elec. Power Grp. v. Alstom S.A.*, *supra*. *See also In re Katz Interactive Call Processing Patent Litig.*, 639 F.3d 1303, 1316 (Fed. Cir. 2011) (“Absent a possible narrower construction of the terms ‘processing,’ ‘receiving,’ and ‘storing,’ . . . those functions can be achieved by any general purpose computer without special programming”). In short, each step does no more than require a generic computer to perform generic computer functions. As to the data operated upon, “even if a process of collecting and analyzing information is ‘limited to particular content’ or a particular ‘source,’ that limitation does not make the collection and analysis other than abstract.” *SAP Am. Inc. v. InvestPic LLC*, 898 F.3d 1161, 1168 (Fed. Cir. 2018) (citation omitted).

Considered as an ordered combination, the computer components of Appellants’ method add nothing that is not already present when the steps are considered separately. The sequence of data reception-analysis-display is equally generic and conventional or otherwise held to be abstract. *See Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014)

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

Viewed as a whole, Appellants' method claims simply recite the concept of insurance as performed by a generic computer. To be sure, the claims recite doing so by advising one to price insurance by applying risk factors associated with route data. But this is no more than abstract conceptual advice on the parameters for such insurance and the generic computer processes necessary to process those parameters, and do not recite any particular implementation.

The method claims do not, for example, purport to improve the functioning of the computer itself. Nor do they effect an improvement in any other technology or technical field. The 14 pages of Specification do not bulge with disclosure, but only spell out different generic equipment³ and parameters that might be applied using this concept and the particular steps such conventional processing would entail based on the concept of

³ The computations are performed in a client device which may be a personal computer, a smart phone, a tablet computer, a smart watch, a head mounted display, a wearable computer or other suitable client device. This is connected to a generic data base server. Spec. paras. 17–18.

insurance under different scenarios. They do not describe any particular improvement in the manner a computer functions. Instead, the claims at issue amount to nothing significantly more than an instruction to apply the abstract idea of insurance using some unspecified, generic computer. Under our precedents, that is not enough to transform an abstract idea into a patent-eligible invention. *See Alice Corp. Pty. Ltd.*, 134 S. Ct. at 2360.

As to the structural claims, they

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

Alice Corp. Pty. Ltd., 134 S. Ct. at 2360.

As to Appellants’ arguments, we adopt the Examiner determinations and analysis from Final Action 2–8 and Answer 8–13 and reach similar legal conclusions. In particular, we are not persuaded by Appellants’ argument that “the collection of risk factor data facilitates an improvement to the accuracy and efficiency in which risk can be assessed, and thus the accuracy and efficiency of a computer system calculating the corresponding insurance price quotes, would likewise be increased.” Br. 13. The use of a computer to improve accuracy and efficiency will not make an abstract concept less abstract. The selection of particular data as parameters in an algorithm may improve the algorithm results, but an algorithm remains an abstraction unto itself.

The steps in Versata’s claims (e.g., arranging, storing, retrieving, sorting, eliminating, determining) are conventional, routine, and well-known. They involve the normal, basic functions of a computer. “In order for the addition of a machine to impose a meaningful limit on the scope of a claim, it must play a significant part in permitting the claimed method to be performed, rather than function solely as an obvious mechanism for permitting a solution to be achieved more quickly, i.e., through the utilization of a computer for performing calculations.” *SiRF Tech., Inc. v. Int’l Trade Comm’n*, 601 F.3d 1319, 1333 (Fed Cir. 2010); *see also Bancorp*, 687 F.3d at 1277–78. Versata’s claims do not meet this test, and instead function solely as a mechanism for permitting the price determination to be performed more quickly.

Versata Dev. Grp., Inc. v. SAP Am., Inc., 793 F.3d 1306, 1335 (Fed. Cir. 2015).

Claims 1, 2, 5–8, 11–14, 17, and 18 rejected under 35 U.S.C. § 103(a) as unpatentable over Bogovich, Brinkmann, Rowley, Cote, and Hara

We adopt the Examiner findings from Final Action 10–22 and Answer 13–19 and reach similar legal conclusions. In particular, we are not persuaded by Appellants’ argument that

Rowley is directed to providing a recommended route that takes current traffic conditions into account. Rowley, 1: 18-21. Rowley analyzes previous routes in an attempt to predict future ones more efficiently (See, e.g., Rowley, 4: 12-19), although Rowley does not use routes as part of a risk assessment process, as Rowley is not directed to solving issues with insurance premium pricing.

Br. 16.

Cote’s techniques associate different surface segments with various risk metrics, but Cote does not assess the risk of a

common route by separately addressing the risks associated with the length of the common route as well as the presence of other risk factors along the common route. Instead, Cote's techniques only address risk metrics associated with different *surfaces* that are traversed by a driver.

Br. 20.

The combination of Rowley and Cote describes identifying common paths (Rowley) and using commonality of routes for insurance purposes (Cote). Cote shows it was known to take commonality of routes with similar surfaces into account for insurance pricing, and Rowley shows that such commonality of routes may be extended to an entire route and determined based on multiple similar trips. One of ordinary skill would have been led to Rowley from Cote for implementation details as to how to determine commonality.

Claims 19, 21, and 23 rejected under 35 U.S.C. § 103(a) as unpatentable over Bogovich, Brinkmann, Rowley, Cote, Hara, and Kortge

Appellants argue these based on the independent claims.

Claims 20, 22, and 24 rejected under 35 U.S.C. § 103(a) as unpatentable over Bogovich, Brinkmann, Rowley, Cote, Hara, and Yager

Appellants argue these based on the independent claims.

CONCLUSIONS OF LAW

The rejection of claims 1, 2, 5–8, 11–14, and 17–24 under 35 U.S.C. § 101 as directed to a judicial exception without significantly more is proper.

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Application 14/203,143

The rejection of claims 1, 2, 5–8, 11–14, 17, and 18 under 35 U.S.C. § 103(a) as unpatentable over Bogovich, Brinkmann, Rowley, Cote, and Hara is proper.

The rejection of claims 19, 21, and 23 under 35 U.S.C. § 103(a) as unpatentable over Bogovich, Brinkmann, Rowley, Cote, Hara, and Kortge is proper.

The rejection of claims 20, 22, and 24 under 35 U.S.C. § 103(a) as unpatentable over Bogovich, Brinkmann, Rowley, Cote, Hara, and Yager is proper.

DECISION

The rejection of claims 1, 2, 5–8, 11–14, and 17–24 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2011).

AFFIRMED