



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.
13/362,443	01/31/2012	Prashanth Ranganathan	70481.499 (P1416US1)	5362
132906	7590	03/19/2019	EXAMINER	
Haynes & Boone, LLP (70481) 2323 Victory Ave. #700 Dallas, TX 75219			SUBRAMANIAN, NARAYANSWAMY	
			ART UNIT	PAPER NUMBER
			3695	
			NOTIFICATION DATE	DELIVERY MODE
			03/19/2019	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):

ipdocketing@haynesboone.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte PRASHANTH RANGANATHAN

Appeal 2018-002251
Application 13/362,443
Technology Center 3600

Before CARL W. WHITEHEAD JR., MICHAEL J. STRAUSS and
ADAM J. PYONIN, *Administrative Patent Judges*.

WHITEHEAD, JR., *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant¹ is appealing the final rejection of claims 1, 2, 5, 6, 9–12, and 25–34 under 35 U.S.C. § 134(a). Appeal Brief 8. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

Introduction

The invention is directed to “methods and systems for credit card (or other online or electronic purchase) fraud alerting based on a user’s location.” Specification ¶ 7.

¹ According to Appellant, the real party in interest is PayPal, Inc. Appeal Brief 2.

Illustrative Claim

1. A system, comprising:

a database having stored thereon information about a plurality of users, wherein information that is stored in the database about a first user of the plurality of users identifies a first user cell phone device that is associated with the first user and a first user account that is associated with the first user; and

a processing system coupled to the database and configured to, in response to executing stored instructions, perform operations comprising:

receiving, over each of a plurality of different times intervals, a set of a plurality of locations, from the first user cell phone device, as detected using one or more wireless transmission interfaces, and store each set of the plurality of locations in the database along with the time interval in which that set was received;

building, using the sets of the plurality of locations that are stored in the database along with the time interval in which each of those sets were received, a plurality of movement-over-time models for the first user cell phone device;

receiving, from a first merchant device subsequent to building the plurality of movement over time models, a payment request to conduct a payment transaction using the first user account;

determining that the payment transaction is not a web transaction and, in response, determining a physical location of the first merchant device;

determining, in response to receiving the payment request, that the first user cell phone device is unavailable and, in response, determining a predicted location of the first user cell phone device using a last known location of the first user cell phone device, a last known heading of the first user cell phone device, and a first movement-over-time model of the plurality of movement-over-time models that is selected based on a last known time that the first user cell phone device was available corresponding with a first time interval at which the first movement over time model was received;

determining a distance between the physical location of the first merchant device and the predicted location of the first user cell phone device; and

communicating an alert if the distance exceeds a predefined distance threshold.

Rejection on Appeal

Claims 1, 2, 5, 6, 9–12, and 25–34 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. Final Action 3–12.

ANALYSIS

Rather than reiterate the arguments of Appellant and the Examiner, we refer to the Appeal Brief (filed September 21, 2017), the Reply Brief (filed December 26, 2017), the Final Office Action (mailed March 21, 2017) and the Answer (mailed October 24, 2017), for the respective details.

35 U.S.C. § 101 rejection

The Examiner determines the claims are patent ineligible under 35 U.S.C. § 101 because:

[T]he claim is directed to location based payment security which is an abstract idea similar to the concepts such as collecting and analyzing information to detect risk and notifying a user when risk is detected (See *Fair Warning v. Iatric*) by building movement over time models based on location information reported from a mobile computing device and using those movement over time models to predict a location of the mobile computing device when the mobile computing device is unavailable (abstract ideas similar to the concepts such as collecting information, analyzing it, and displaying certain results of the collection and analysis (See *Electric Power Group v. Alstom S.A.*) using mathematical relationships/formulas (See *Alice Corp. v. CLS Bank Int'l* and also See *Bilski v. Kappos*)) and determining a distance between that predicted location and a merchant device that provided the payment request (abstract

ideas similar to the concepts such as comparing information regarding a sample or test subject to a control or target data (See *Ambry, Myriad CAFC*) and calculating parameters indicating an abnormal condition (See *In re Grams*) to determine whether to communicate an alert if the distance exceeds a predefined distance threshold (abstract idea similar to the concepts such as collecting information, analyzing it, and displaying certain results of the collection and analysis (See *Electric Power Group v. Alstom S.A.*)).

Final Action 4; see *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208, 217 (2014) (Describing the two-step framework “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.”).

After the mailing of the Answer and the filing of the Briefs in this case, the USPTO published revised guidance on the application of § 101. 2019 REVISED PATENT SUBJECT MATTER ELIGIBILITY GUIDANCE, 84 Fed. Reg. 50 (Jan. 7, 2019) (hereinafter “Memorandum”). Under the Memorandum, the Office first looks 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, 2018)).

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, does the Office 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.

Appellant argues the pending claims are not directed to an abstract idea because claim 1 “relates to a series of concrete, technical steps performed relative to a real-world hardware device (a user’s cell phone)” and, therefore, “Appellant submits claim 1 is not simply directed to the abstract idea of ‘location based payment security’ as alleged by the Examiner.” Appeal Brief 10.

Claim 1 recites financial components and steps involving merchants, payments, and fraud prevention. These steps comprise fundamental economic principles (including mitigating risk) or practices and/or commercial or legal interactions; thus the claim recites the abstract idea of “certain methods of organizing human activity.” Memorandum, Section I (Groupings of Abstract Ideas); *see* Specification ¶ 7 (“One embodiment provides methods and systems for credit card (or other online or electronic purchase) fraud alerting based on a user’s location.”). Our reviewing court has found claims to be directed to abstract ideas when they recited similar subject matter. *See 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.”); *Accenture Glob. Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1345 (Fed. Cir. 2013) (claims reciting “generalized software components arranged to implement an abstract concept [of generating insurance-policy-related tasks based on rules to be completed upon the occurrence of an event] on a computer” not patent eligible).

Having determined that the claims recite a judicial exception, our analysis under the Memorandum turns now to determining whether there are “additional elements that integrate the judicial exception into a practical application.” *See* MPEP § 2106.05(a)–(c), (e)–(h).

The Examiner finds:

[F]unctions such as “storing information, receiving and storing data, building models based on the data, receiving additional data, determining locations based on the data and the models, determining a distance based on determined locations, and communicating an alert based on a criteria” are conventional functions of a computer system. The elements of the instant process, when taken in combination, together do not offer substantially more than the sum of the functions of the elements when each is taken alone.

Final Action 9.

Appellant contends:

Claim 1 . . . relates to a particular technological environment where wireless transmission interfaces are used to capture the location of a cell phone and a plurality of movement-over-time models are then using the location information.

Claim 1 further relates to first determining that the cell phone device is not available (e.g. not visible from a cellular base tower), then determining a predicted location of the cell phone. The predicted location is found using a last known location and heading (e.g., direction of travel) of the cell phone. Further, predicting the location of the phone also depends on selecting a particular model from the plurality of movement-over-time models based on a last known time the cell phone was available (e.g., in communication with a cellular base tower).

Appeal Brief 9–10.

Claim 1 recites additional limitations beyond the judicial exception of addressing the problem of fraudulent payment transactions. These limitations include: (1) “receiving, over each of a plurality of different times

intervals, a set of a plurality of locations, from the first user cell phone device,” (2) “determining that the payment transaction is not a web transaction and, in response, determining a physical location of the first merchant device,” (3) “determining a predicted location of the first user cell phone device using a last known location of the first user cell phone device . . . corresponding with a first time interval at which the first movement over time model was received,” (4) “determining a distance between the physical location of the first merchant device and the predicted location of the first user cell phone device,” and (5) “communicating an alert if the distance exceeds a predefined distance threshold.”

We conclude these limitations integrate the recited judicial exception of preventing fraudulent payment transactions into a practical application because the limitations’ additional elements “uses the judicial exception in some other 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 55. Subsequently, we do not sustain the Examiner’s finding that claims 1, 2, 5, 6, 9–12 and 25–35 are not patent eligible.

Appeal 2018-002251
Application 13/362,443

DECISION

The Examiner's non-statutory subject matter rejection of claims 1, 2, 5, 6, 9–12 and 25–34 is reversed.

REVERSED