



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.
14/022,741	09/10/2013	Rohit CHAUHAN	0076412-000173	2653
21839	7590	10/25/2018	EXAMINER	
BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			UBER, NATHAN C	
			ART UNIT	PAPER NUMBER
			3622	
			NOTIFICATION DATE	DELIVERY MODE
			10/25/2018	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):

ADIPDOC1@BIPC.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ROHIT CHAUHAN and PO HU

Appeal 2017-002253
Application 14/022,741¹
Technology Center 3600

Before BRUCE T. WIEDER, TARA L. HUTCHINGS, and
ROBERT J. SILVERMAN, *Administrative Patent Judges*.

WIEDER, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the Examiner's final rejection of claims 1–26. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

CLAIMED SUBJECT MATTER

Appellants' invention "relates to the distribution of optimized offers to a mobile device, specifically the optimization of offers based on

¹ According to Appellants, the real party in interest is MasterCard International Incorporated. (Appeal Br. 2.)

identification of an inferred future geographic location based on a current location and a location history of the mobile device.” (Spec. ¶ 1.)

Claims 1 and 14 are the independent claims on appeal. Claim 1 is illustrative. It recites:

1. A method for distributing an optimized offer to a mobile communication device, comprising:

storing, in an offer database, a plurality of offer data entries, wherein each offer data entry includes data related to an offer for the purchase of goods or services including at least offer data and an offer location;

storing, in a consumer database, a consumer profile, wherein the consumer profile includes data related to a consumer including at least historical geographic location data of a mobile communication device associated with the related consumer;

receiving, by a receiving device, a current geographic location of the associated mobile communication device;

identifying, by a processing device, at least one inferred future geographic location for the associated mobile communication device based on the received current geographic location and the historical geographic location data of the associated mobile communication device;

identifying, in the offer database, at least one offer data entry where the included offer location corresponds to one of the identified at least one inferred future geographic location; and

transmitting, by a transmitting device, the offer data included in the identified at least one offer data entry to the associated mobile communication device.

REJECTIONS

Claims 1–26 are rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.

Claims 1–26 are rejected under 35 U.S.C. § 102(a)(2) as anticipated by Blackhurst (US 2011/0246306 A1, pub. Oct. 6, 2011).

ANALYSIS

The § 101 rejection

Appellants argue claims 1–26 together. We select claim 1 as representative. Claims 2–26 will stand or fall with claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv).

“Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101. Section 101, however, “contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014) (quoting *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013)).

Alice applies a two-step framework, earlier set out in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66 (2012), “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice*, 134 S. Ct. at 2355.

Under the two-step framework, it must first be determined if “the claims at issue are directed to a patent-ineligible concept.” *Id.* If the claims are determined to be directed to a patent-ineligible concept, e.g., an abstract idea, then the second step of the framework is applied to determine if “the elements of the claim . . . contain[] an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Id.* at 2357 (citing *Mayo*, 566 U.S. at 72–73, 79).

With regard to step one of the *Alice* framework, the Examiner determines that the claims are “directed toward . . . the abstract idea of distributing offers to mobile devices, based on identification of an inferred future geographic location.” (Final Action 3.) The Examiner further determines that “the claims are directed toward a fundamental economic practice.” (*Id.*) More specifically, the Examiner determines that Appellants’ invention simply uses “traditional coupon marketing techniques and implement[s] the techniques through computers. For example, retaining historical data on a consumer’s location (e.g. home zip code) and sending the consumer relevant coupons based on the consumer’s future location . . . is not a function that requires the use of a computer.” (Answer 9.)

Appellants disagree and argue that “Appellant’s [sic] claims recite, with specificity, a method and system dependent upon the receipt of mobile communication device location data and the implementation of that data within an electronic process to optimize offer distribution. The pending claims recite multiple particularly configured databases” (Appeal Br. 8–9.) Appellants further argue that “[t]he ‘abstract idea’ identified by the Office . . . is not similar to any ‘abstract idea’ identified by the courts in the body of precedential case law.” (*Id.* at 9, emphasis omitted.)

Under step one of the *Alice* framework, we “look at the ‘focus of the claimed advance over the prior art’ to determine if the claim’s ‘character as a whole’ is directed to excluded subject matter.” *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016) (quoting *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016)).

The Specification provides evidence as to what the claimed invention is directed. In this case, the Specification discloses that the invention

“relates to the distribution of optimized offers to a mobile device, specifically the optimization of offers based on identification of an inferred future geographic location based on a current location and a location history of the mobile device.” (Spec. ¶ 1.) Claim 1 provides additional evidence. Claim 1 recites “[a] method for distributing an . . . offer . . . comprising: storing . . . data related to an offer for the purchase of goods or services,” “storing . . . data related to a consumer including . . . historical geographic location data of a mobile . . . device,” “receiving . . . a current geographic location of the associated mobile . . . device,” “identifying . . . at least one inferred future geographic location for the associated mobile . . . device,” identifying at least one stored offer that “corresponds to one of the identified . . . inferred future geographic location[s],” “and transmitting . . . the offer data . . . to the associated mobile . . . device.” In short, claim 1 is directed to targeting an offer by sending the offer to a consumer based on the consumer’s location and an inferred future location. More specifically, the claim recites determining a current and future location of, and sending an offer to, a consumer’s mobile device.

Although we and the Examiner describe, at different levels of abstraction, to what the claims are directed, it is recognized that “[a]n abstract idea can generally be described at different levels of abstraction.” *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016). That need not and, in this case does not, “impact the patentability analysis.” *Id.* at 1241.

We disagree with Appellants that the abstract idea to which the claims are directed “is not similar to any ‘abstract idea’ identified by the courts in

the body of precedential case law.” (Appeal Br. 9, emphasis omitted.) The Federal Circuit

has held that “customizing information based on . . . information known about the user” is an abstract idea. *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1369 (Fed. Cir. 2015). The court in the *Intellectual Ventures I* case explained that tailoring of content based on information about the user—such as where the user lives or what time of day the user views the content—is an abstract idea that is as old as providing different newspaper inserts for different neighborhoods. *Id.*

Affinity Labs of Texas, LLC v. Amazon.com Inc., 838 F.3d 1266, 1271 (Fed. Cir. 2016). In other words, targeted advertising “is a ‘fundamental, long-standing, well-known concept’ that is ineligible under Section 101.” *Morsa v. Facebook, Inc.*, 77 F. Supp. 3d 1007, 1013 (C.D. Cal. 2014), *aff’d*, 622 F. App’x 915 (Fed. Cir. 2015).

Moreover, the limitations of claim 1 do not recite implementation details. Instead, they recite functional results to be achieved. In other words, claim 1 does not recite “a particular way of programming or designing the software . . . , but instead merely claim[s] the resulting systems.” *Apple, Inc.*, 842 F.3d at 1241. “Indeed, the claim language here provides only a result-oriented solution, with insufficient detail for how a computer accomplishes it. Our law demands more.” *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1342 (Fed. Cir. 2017).

In view of the above, we agree with the Examiner that claim 1 is directed to an abstract idea.

Step two of the *Alice* framework has been described “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*, 134 S. Ct. at 2355 (alteration in original) (quoting *Mayo*, 566 U.S. at 72–73).

Appellants seek to analogize their claims to “Example 21 of the July 2015 Examples.”² (Appeal Br. 10.) In particular, Appellants argue that “when steps of Appellant’s [sic] claim 1 are viewed as an ordered combination, it is apparent that the claims address the mobile communication-centric challenge of providing *relevant* and optimized offers to the mobile device.” (*Id.* at 11.)

As an initial matter, we note that the Update simply presents hypothetical examples. (*See* Update Appendix 1.) We also note that claim 2 in Example 21 recites “[a] method of distributing stock quotes over a network to a remote subscriber computer” including the steps of

transmit[ing] the formatted stock quote alert over a wireless communication channel to a wireless device associated with a subscriber based upon the destination address and transmission schedule,

wherein the alert activates the stock viewer application to cause the stock quote alert to display on the remote subscriber computer and to enable connection via the URL to the data source over the Internet when the wireless device is locally connected to the remote subscriber computer and the remote subscriber computer comes online.

(*Id.* at 3.) The Update Appendix explains that

[t]he claimed invention addresses the Internet-centric challenge of alerting a subscriber with time sensitive information when the subscriber’s computer is offline. This is addressed by

² *See July 2015 Update: Subject Matter Eligibility* (July 2015) (available at <https://www.uspto.gov/sites/default/files/documents/ieg-july-2015-update.pdf>); *see also July 2015 Update Appendix 1: Examples* (July 2015) (available at <https://www.uspto.gov/sites/default/files/documents/ieg-july-2015-app1.pdf>) (“Update Appendix”).

transmitting the alert over a wireless communication channel to activate the stock viewer application, which causes the alert to display and enables the connection of the remote subscriber computer to the data source over the Internet when the remote subscriber computer comes online.

(*Id.* at 4.)

Claim 1 in Example 21 is similar to Claim 2 except that Claim 1 lacks the stock viewer application; and, thus, does not address “the Internet-centric challenge of alerting a subscriber . . . when the subscriber’s computer is offline” or “enable[] the connection of the remote subscriber computer to the data source over the Internet when the remote subscriber computer comes online.” Claim 1 in Example 21 is described as patent ineligible. (*Id.* at 3–4.) Appellants do not persuasively argue why simply receiving the location of the consumer, and, based on that location information and historical location information, inferring a future location, and sending an offer, is analogous to addressing “the Internet-centric challenge of alerting a subscriber . . . when the subscriber’s computer is offline” and, in particular, “enables the connection of the remote subscriber computer to the data source over the Internet when the remote subscriber computer comes online.” (*See id.* at 4.)

Appellants also seek to analogize the present claims to the claims in *DDR Holdings*. (*See* Appeal Br. 12.) We disagree. Unlike Appellants’ claim 1, the claims in *DDR Holdings* “specify how interactions with the Internet are manipulated to yield a desired result—a result that overrides the routine and conventional sequence of events ordinarily triggered by the click of a hyperlink.” *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1258 (Fed. Cir. 2014) (emphasis added). In other words, the invention

claimed in *DDR Holdings* does more than “simply instruct the practitioner to implement the abstract idea with routine, conventional activity.” *See Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014); *see also DDR Holdings*, 773 F.3d at 1259.

Appellants further argue that “even if Appellant’s [sic] claims are considered to touch upon some ‘abstract idea,’ they are confined to a particular and useful technical application of an electronic process by unconventional steps (i.e., there is no ‘brick and mortar’ analog to Appellant’s claimed method and system).” (Appeal Br. 12.) We disagree. As discussed above, Appellants’ invention simply uses “traditional coupon marketing techniques and implement[s] the techniques through computers. For example, retaining historical data on a consumer’s location (e.g. home zip code) and sending the consumer relevant coupons based on the consumer’s future location . . . is not a function that requires the use of a computer.” (Answer 9.) In other words, we do not find it unconventional for a store to, e.g., retain the address of a customer who previously visited the store and to send that customer a coupon for use on a future visit.

To the extent Appellants’ argument that the claimed invention is “confined to a particular and useful technical application” (Appeal Br. 12) is an argument that the claims do not preempt all solutions for the abstract idea, we do not find the argument persuasive of error. Preemption is not a separate test.

To be clear, the proper focus is not preemption *per se*, for some measure of preemption is intrinsic in the statutory right granted with every patent to exclude competitors, for a limited time, from practicing the claimed invention. *See* 35 U.S.C. § 154. Rather, the animating concern is that claims should not be coextensive with a natural law, natural phenomenon, or abstract idea; a

patent-eligible claim must include one or more substantive limitations that, in the words of the Supreme Court, add “significantly more” to the basic principle, with the result that the claim covers significantly *less*. See *Mayo* 132 S. Ct. at 1294 [566 U.S. at 72–73].

CLS Bank Int’l v. Alice Corp. Pty. Ltd., 717 F.3d 1269, 1281 (Fed. Cir. 2013) (Lourie, J., concurring), *aff’d*, 134 S. Ct. 2347 (2014). Moreover, “[w]here a patent’s claims are deemed only to disclose patent ineligible subject matter under the *Mayo* framework, as they are in this case, preemption concerns are fully addressed and made moot.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015). In other words, “preemption may signal patent ineligible subject matter, [but] the absence of complete preemption does not demonstrate patent eligibility.” *Id.*

Taking the claim elements separately, the functions performed by the mobile device and the processor at each step of the process are purely conventional. Using a mobile device and a processor to store data, transmit data (including location data), analyze data, and issue instructions/messages based on the results, are basic computer functions. See, e.g., *Alice*, 134 S. Ct. at 2359. In other words, each step does no more than require generic computer components to perform generic computer functions.

Considered as an ordered combination, the mobile device and processor of Appellants’ method add nothing that is not already present when the steps are considered separately. The claims do not, for example, purport to improve the functioning of the mobile device or the processor itself. Nor do they effect an improvement in any other technology or technical field. Although Appellants argue, e.g., that “the Examiner

overlooks benefits provided by the claims (e.g., improved location determination ability)” (Reply Br. 5–6), Appellants do not cite any evidence to support this argument, nor does claim 1 recite any improved ability to locate the mobile device. In other words, “these claims in substance [are] directed to nothing more than the performance of an abstract business practice . . . using a conventional computer. Such claims are not patent-eligible.” *DDR Holdings*, 773 F.3d at 1256. Thus, the claims at issue amount to nothing significantly more than an instruction to apply the abstract idea using some unspecified, generic computer components. That is not enough to transform an abstract idea into a patent-eligible invention. *Alice*, 134 S. Ct. at 2360.

In view of the above, we agree with the Examiner that claim 1 is directed to a judicial exception without significantly more. Claims 2–26 are not separately argued and fall with claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv).

The § 102(a)(2) rejection

The Examiner finds that paragraph 75 of Blackhurst discloses “identifying, by a processing device, at least one inferred future geographic location for the associated mobile communication device based on the received current geographic location and the historical geographic location data of the associated mobile communication device,” as recited in claim 1. (Final Action 5, emphasis omitted.)

Appellants disagree and argue that

[p]aragraph [0075] of Blackhurst does not describe a step of identifying a future geographic location based on both a received current geographic location and the historical geographic location data of the mobile device. Further, the “past” location

data of Blackhurst is described in paragraph [0069] of that application and indicates that the Blackhurst system can provide offers based on routes or locations a customer typically frequents. Such data would not, for instance, be applicable to situations involving a new route or location, as it does not *additionally* take into account current location information.

(Reply Br. 13; *see also* Appeal Br. 14.)

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros., Inc. v. Union Oil Co. of Calif.*, 814 F.2d 628, 631 (Fed. Cir. 1987).

To establish inherency, the extrinsic evidence “must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.” *Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1268, 20 U.S.P.Q.2d 1746, 1749 (Fed.Cir.1991). “Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *Id.* at 1269, 948 F.2d 1264, 20 U.S.P.Q.2d at 1749 (quoting *In re Oelrich*, 666 F.2d 578, 581, 212 U.S.P.Q. 323, 326 (C.C.P.A.1981)).

In re Robertson, 169 F.3d 743, 745 (Fed. Cir. 1999).

Blackhurst discloses a “merchant offer program application [that] monitors the location of the customer over time and recognizes patterns in the routes the customer travels and locations that the customer frequently visits.” (Blackhurst, Abstract.) Paragraph 75 of Blackhurst discloses that

the merchant offer program application **10** will not only determine products related to the content that the customer **6** is viewing, but can also determine the current location of the customer or the past or possible future locations of the customer **6** based on patterns of mobile tracking of the customer **6** through the location-determining device. The merchant offer program

application **10** will use the customer's current, past, or future locations as well as the content the customer **6** is viewing to provide the customer **6** with offers for related products located near the customer's locations.

(*Id.* ¶ 75.) In short, paragraph 75 teaches that the merchant offer program application will use “the customer's current, past or future locations” in providing the customer with offers. But paragraph 75 does not expressly set forth how the future locations are determined. Appellants' claim 1, however, recites a particular way to identify future locations, i.e., “identifying . . . at least one inferred future . . . location . . . based on the . . . current . . . location and the historical . . . location data.”

Appellants point to paragraph 69 of Blackhurst as providing additional insight. In relevant part, paragraph 69 discloses:

In some embodiments explained herein offers that are provided to the customer **6** are based on the customer's current location or the customer's home. However, many customers **6** spend the majority of their time at work. . . . The ability to provide offers based on the routes or locations that a customer **6** often frequents allow the customer **6** to receive the best offers that may be the most convenient for the customer to take advantage of at a time when the customer **6** may be near a location that the customer frequents in the future. For example, the customer **6** may be interested in receiving offers for TV's. However, it may be the weekend and the customer may not receive offers that are relevant to the route the customer **6** takes to work or that occur near the customer's work because the customer is at a location near his home. The patterns identify [sic] by the merchant offer program application **10** based on tracking the customer's past locations allow the merchant offer program application **10** to provide better offers for a TV at a

location near the customer's route to work or at a store located near the customer's work.

(*Id.* ¶ 69.) Paragraph 69 suggests that to the extent the merchant offer program application infers a future location, it does so by identifying patterns “based on tracking the customer's past locations,” rather than based on the customer's current and past locations.

In view of the above, we are persuaded of error. The cited portions of Blackhurst do not expressly or inherently describe “identifying, by a processing device, at least one inferred future geographic location for the associated mobile communication device based on the received current geographic location and the historical geographic location data of the associated mobile communication device,” as recited in claim 1. Independent claim 14 contains similar language, and for similar reasons we are persuaded of error.

DECISION

The Examiner's rejection of claims 1–26 under 35 U.S.C. § 101 is affirmed.

The Examiner's rejection of claims 1–26 under 35 U.S.C. § 102(a)(2) is reversed.

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