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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JEFFERY R. BACH

Appeal 2017-003564
Application 12/872,230
Technology Center 3600

Before DAVID M. KOHUT, CARL L. SILVERMAN, and
MATTHEW J. McNEILL, *Administrative Patent Judges*.

KOHUT, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants seek our review, under 35 U.S.C. § 134(a), of the Examiner's final rejection of claims 1, 3–9, 21, 22, and 25–34.¹ We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ Claims 2, 10–20, 23, and 24 were previously cancelled.

INVENTION

The invention relates to “a navigation system to identify and then provide a user with a map that highlights areas and/or locations that are accessible from a starting location (e.g., the user’s current location) by public transit together with travel on the road and pedestrian network under certain conditions.” Spec. 3:6–9. Figure 7 illustrates a map generated by the claimed invention.

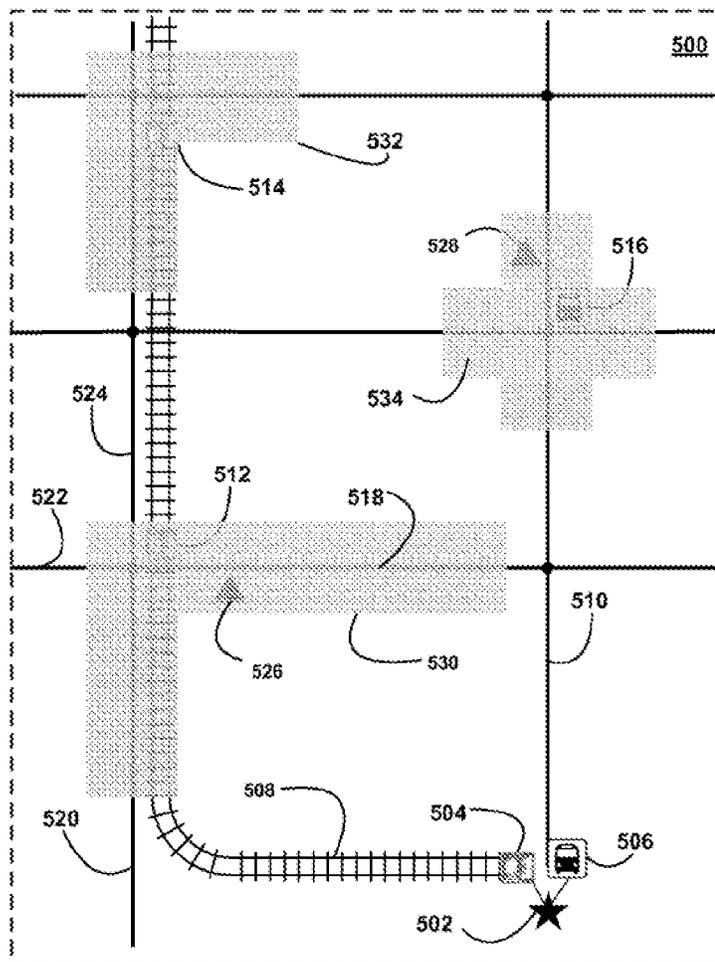


FIG. 7

Figure 7 depicts a map 500 of a geographic region. Spec. 12:26–29. Map 500 depicts a starting location 502 and includes shaded regions around

transit stops that identify geographic areas that are accessible via transit within an identified time restriction. *Id.* at 17:20–22. In other words, from a starting point 502, the shaded regions identify where a person can reach, via transit and subsequent walking, within an identified amount of time.

Claim 1 is representative and is reproduced below.

1. A method of operating a navigation system comprising:

receiving into the navigation system a query for a starting location by public transit and a maximum length of time for a trip;

retrieving a first transit stop data record from a geographic database, wherein a first transit stop in the first transit stop data record is in proximity to the starting location;

calculating at least one travel route along a public transit line that connects to the first transit stop;

retrieving a second transit stop data record from the geographic database, wherein the second transit stop data record includes a second transit stop on the public transit line accessible, wherein the second transit stop data record is selected based on the maximum length of time for the trip;

identifying an area region around the second transit stop accessible from the second transit stop defined by the maximum length of time for the trip and a location of the second transit stop; and

generating a transit access map that highlights the area region by visually distinguishing the area region around the second transit stop accessible from the second transit stop in the maximum length of time for the trip.

REJECTIONS

The Examiner rejects claims 1, 3–9, 21, 22, and 25–34 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Final Act. 5.

The Examiner rejects claims 1, 3–9, 21, 22, and 25–34 under 35 U.S.C. § 103(a) as obvious over Kaplan et al. (US 6,401,034 B1, iss. June 4, 2002) and Liebling (US 7,571,050 B2, iss. Aug. 4, 2009). Final Act. 5–8.

ANALYSIS

Rejection under 35 U.S.C. § 101

The Examiner rejects claims 1, 3–9, 21, 22, and 25–34 under 35 U.S.C. § 101 applying the two-part analytical framework of *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2355 (2014). Final Act. 5. Applying the first part of the analysis, the Examiner concludes that claims 1, 3–9, 21, 22, and 25–34 are directed to the concept of “**identifying accessible regions around a transit stop.**” *Id.* The Examiner asserts this concept is an abstract idea in the form of a fundamental economic practice and a method of organizing human activity. *Id.* Applying the second part of the analysis, the Examiner concludes that the additional claim elements beyond the abstract idea are not enough to qualify as “significantly more” than the abstract idea itself. *Id.* The Examiner asserts that the additional limitations “are merely instructions to implement the abstract idea on a computer and **require no more than a generic computer to perform generic computer functions** that are well-understood, routine[,] and conventional activities previously known to the industry.” *Id.*

Beginning with the first step of the *Alice* framework, we must determine “whether the claims at issue are directed to one of those patent-

ineligible concepts.” *Alice*, 134 S. Ct. at 2355. In performing this determination, we ask whether the focus of the claims is on a specific asserted improvement in computer capabilities or, instead, on a process that qualifies as an “abstract idea” for which computers are invoked merely as a tool. *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335–36 (Fed. Cir. 2016) (citing *Alice*, 134 S. Ct. at 2358–59). Here, Appellant disputes the Examiner’s conclusion that the claims are directed to the abstract idea of “identifying accessible regions around a transit stop.” Br. 5–7. Specifically, Appellant argues that the claimed invention is directed to a specific application of navigation calculations on a navigation system and is not directed to fundamental economic practices or methods of organizing human activity. *Id.* at 5. Appellant further cites *Enfish* and asserts that the claimed navigation system is a “computer related invention of a specific application of the routing calculations on the combination of the transit line and the pedestrian network.” *Id.* at 6. Finally, Appellant argues that “the claims include the particulars of a display, providing a look and feel for the transit access map,” as evidence that the claims contain patentable subject matter. *Id.* at 7 (citing *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014)).

We are not persuaded by Appellant’s arguments. We have analyzed independent claims 1, 21, and 30, and agree with the Examiner that the claims are directed to an abstract idea, because the claims are directed to a navigation system for “identifying accessible regions around a transit stop.” For example, the preamble of independent claim 1 recites “operating a navigation system.” In another example, the “Summary of the Invention” section of the Specification refers to “operating a navigation system.” Spec.

2:5–6. Moving on to the implementation steps of independent claim 1, we find that the claimed steps of

receiving into the navigation system a query for a starting location by public transit and a maximum length of time for a trip;

retrieving a first transit stop data record from a geographic database, wherein a first transit stop in the first transit stop data record is in proximity to the starting location;

calculating at least one travel route along a public transit line that connects to the first transit stop;

retrieving a second transit stop data record from the geographic database, wherein the second transit stop data record includes a second transit stop on the public transit line accessible, wherein the second transit stop data record is selected based on the maximum length of time for the trip;

identifying an area region around the second transit stop accessible from the second transit stop defined by the maximum length of time for the trip and a location of the second transit stop; and

generating a transit access map that highlights the area region by visually distinguishing the area region around the second transit stop accessible from the second transit stop in the maximum length of time for the trip

essentially encompasses the basic steps of collecting, storing, and processing information. The Federal Circuit has found that such steps are directed to no more than the abstract idea of conventional information processing that can be performed by humans and, thus, are patent-ineligible. *See Electric Power Grp., LLC v. Alstom S.A.*, 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”); *See Content Extraction and Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d 1343, 1345–48 (Fed. Cir. 2014).

Because we conclude that the claims are directed to an abstract idea, we turn to step two of the *Alice* analysis. In step two, we consider the elements of the claims “individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 134 S. Ct. at 2355 (quoting *Mayo*, 566 U.S. 66, 78–79 (2012)). The Examiner concludes that the additional elements “merely perform **basic computer functions that are well-understood, routine and conventional.**” Ans. 3. Appellant disputes the Examiner’s characterization, and asserts that the claimed “routing calculations are an improvement to the navigation systems in the prior art. Because the claimed invention provides an improvement to another technology or technical field, the claims are directed to significantly more than an abstract idea.” Br. 8. Further, Appellant asserts that claims 1, 21, and 30 contain unconventional steps that confine the claim to a particular useful application. *Id.* Specifically, Appellant directs us to claim 21 reciting

calculate an area region around the second transit stop accessible from the second transit stop defined by the maximum length of time for the trip and a location of the second transit stop, wherein the processor is configured to generate a map that depicts the area region by visually distinguishing the area region around the second transit stop accessible from the second transit stop based on the maximum length of time for the trip.

Id. Appellant further directs us similar recitations in claims 1 and 30. *Id.* at 8–9.

We are not persuaded by Appellant’s arguments. Appellant highlights the calculation to determine an area region around a transit stop and the

claimed transit access map that visually distinguishes the area region around a transit stop. *Id.* We are unpersuaded, however, because Appellant merely identifies calculations, data processing, and displaying information and does not sufficiently explain how such elements amount to an unconventional usage. Further, the identified steps themselves fall into the category of abstract concepts and, thus, do not transform the claims into an inventive concept. *See Electric Power Grp.*, 830 F.3d at 1355. Consequently, although the identified steps may confine the invention to a particular transit application, their use alone is insufficient to rise to the level of “substantially more.”

Accordingly, we determine that claims 1, 3–9, 21, 22, and 25–34 are directed to identifying accessible regions around a transit stop, which is an abstract idea, and that the other claim limitations do not articulate an inventive concept that is “significantly more” than that abstract idea in a manner sufficient to confer patent eligibility under 35 U.S.C. § 101. Therefore, we sustain the Examiner’s rejection of claims 1, 3–9, 21, 22, and 25–34 under 35 U.S.C. § 101.

Rejection under 35 U.S.C. § 103

Independent claim 1 recites, in relevant part, “generating a transit access map that highlights the area region by visually distinguishing the area region around the second transit stop accessible from the second transit stop in the maximum length of time for the trip.” Independent claims 21 and 30 recite substantially similar limitations.

The Examiner finds that Kaplan teaches “generating a transit access map that highlights the area region by visually distinguishing the area region

around the second transit stop accessible from the second transit stop in the maximum length of time for the trip.” Final Act. 6 (citing Figs. 3, 10–15). Specifically, the Examiner finds that a “map is displayed to the user that shows the current starting position; the intermediate points of interest along the route as well as highlighting the location and distance of the points of interest from the route.” Ans. 5 (citing Kaplan Figs. 3, 10–14, 16, 18–20). The Examiner further finds that Liebling teaches “a transit-coordinated local search method that determines the transit route including a list of bus stops, routes, and travel times on a public transit system based on the first search which describes a point of interest (destination) and the starting location.” Ans. 5 (citing Liebling 1:24–43, 3:17–55).

Appellant argues that the combination of Kaplan and Liebling fails to teach or suggest “generating a transit access map that highlights the area region by visually distinguishing the area region around the second transit stop accessible from the second transit stop in the maximum length of time for the trip.” Br. 9–13. Specifically, Appellant argues that “Kaplan’s search area is not based on a transit stop and is not based on the length of time for the trip.” *Id.* at 12. Further, Appellant argues that Liebling does not describe any transit map that highlights a region around a transit stop and does not describe a transit map with an area defined by a length of time of a trip. *Id.*

In response, the Examiner asserts that Appellant is improperly arguing against Kaplan and Liebling individually. Ans. 4. Further, the Examiner finds that Kaplan allows a user to specify and find a point of interest along a route to a final destination as well as a time restriction for the intermediate stop. Ans. 4 (citing Abstract, Fig. 17). Hence, the Examiner asserts that

Kaplan allows a user to specify the total maximum route time to a chosen destination. *Id.* The Examiner further finds that Liebling teaches a method of locating a particular point of interest relative to a location. *Id.* According to the Examiner, Liebling's search method is transit based and determines the required travel time to reach the particular point of interest via transit. *Id.* at 5 (citing Liebling 1:24–43, 3:17–55, Fig. 4).

We find Appellant's argument to be persuasive of Examiner error. The Examiner does not direct us to any disclosure in Kaplan or Liebling that suggests “visually distinguishing the area region around the second transit stop accessible from the second transit stop in the maximum length of time for the trip,” as recited in independent claim 1 and similarly recited in independent claims 21 and 30. The Examiner finds that Kaplan discloses a navigation system that allows a user to search for a particular point of interest that is within an area reachable within a specified time restriction. Ans. 4 (citing Abstract, Fig. 17). The specified time restriction along with additional data such as vehicle speed and speed limits define an area along a current route to search for a particular point of interest. Br. 12 (citing Kaplan 8:17–23, Figs. 10–14). The Examiner further finds that Liebling describes a transit-coordinated local search method that determines the transit route to reach a point of interest. Ans. 6, 7. Liebling displays a map that identifies transit route options including the time length of the trip using real time transit data. *See* Liebling Fig. 2.

The aforementioned findings do not teach or suggest the disputed claim element because they do not disclose generating a transit map that visually distinguishes an area around a transit stop based on a maximum length of time of a trip. Br. 12. Although Kaplan calculates a search area,

the search area is based upon the current vehicle location and not a transit stop, and the Examiner has not shown that the search area is generated in a map. Br. 12; *see* Kaplan 8:11–14. Additionally, although Liebling identifies transit routes on a map, it does not highlight an area region by visually distinguishing the area region around a second transit stop. Br. 12; *see* Liebling Fig. 2. Instead, Liebling merely visually distinguishes a transit route from a starting point to a point of interest. *See* Liebling Fig. 2. In summation, the Examiner has not sufficiently explained how the combination of Kaplan and Liebling teaches “visually distinguishing the area region around the second transit stop accessible from the second transit stop in the maximum length of time for the trip,” as recited in independent claim 1 and similarly recited in independent claims 21 and 30.

For the foregoing reasons, we do not sustain the Examiner’s rejection under § 103.

DECISION

We AFFIRM the rejection of claims 1, 3–9, and 21, 22, and 25–34 under 35 U.S.C. § 101.

We REVERSE the rejection of claims 1, 3–9, and 21, 22, and 25–34 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