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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte TETSU OHBA

Appeal 2018-004791
Application 14/631,427
Technology Center 3600

Before STEFAN STAICOVICI, LEE L. STEPINA, and
ARTHUR M. PESLAK, *Administrative Patent Judges*.

STEPINA, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Tetsu Ohba (“Appellant”)¹ appeals under 35 U.S.C. § 134(a) from the Examiner’s decision rejecting claims 1–20. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

¹ Appellant’s Appeal Brief dated Sept. 22, 2017 (“Appeal Br.”), lists Alpine Electronics, Inc. as the real party in interest. Appeal Br. 1.

CLAIMED SUBJECT MATTER

The claims are directed to a method and system of route guidance for a towing vehicle. Spec. ¶ 1. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A method of route guidance for a first vehicle, comprising:
 - measuring, by a position measuring device which includes a GPS (Global Positioning System) receiver, a present vehicle position based on GPS signals;
 - sensing, by a sensor of the first vehicle, an object behind the first vehicle;
 - determining whether a current routing mode is a towing route mode;
 - accessing a map database comprising restriction information regarding a towing vehicle, if it is determined that the current routing mode is the towing route mode; and
 - providing route information including the restriction information regarding a towing vehicle, if it is determined that the current routing mode is the towing route mode, and
 - wherein determining whether a current routing mode is a towing route mode is automatically executed by recognition of a second vehicle behind the first vehicle based on signals from the sensor of the first vehicle.

REJECTION²

Claims 1–20 are rejected under 35 U.S.C. § 101 as being directed to ineligible subject matter.

² A rejection of claims 1–20 under 35 U.S.C. § 102(a)(1) as anticipated by Roemersperger et al. (US 2014/0303886 A1, pub. Oct. 9, 2014) and a rejection of claims 2 and 12 under 35 U.S.C. § 103 as unpatentable over Roemersperger and Soderlind et al. (US 2013/0107045 A1, pub. May 2, 2013) are withdrawn in the Examiner’s Answer dated Feb. 7, 2018 (“Ans.”).
Ans. 3

OPINION

The Examiner finds that the claims are directed to “the abstract idea involving route guidance via GPS.” Ans. 4. According to the Examiner, the recited “measuring data, sensing an object, determining a mode, accessing a database, providing route information, and determining a mode . . . are similar to those steps of collecting information, analyzing it, and displaying certain results of the collection and analysis,” that the Federal Circuit found are directed to an abstract idea. Ans. 4 (citing *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1352 (Fed. Cir. 2016)). The Examiner finds that the recited elements taken alone, or in combination, “do not offer substantially more” than the sum of the functions of the elements taken alone, because they “undertake their roles in performance of their activities according to their generic functionalities which are well-understood, routine, and conventional.” Ans. 4–5. The Examiner concludes that viewed as a whole, these additional claim elements do not amount to “significantly more than the abstract idea itself,” because the elements “are used in a routine and conventional way, where the elements need not be specialized or require special components, programming, or actions.” *Id.* at 5.

Appellant argues that determining whether there is “an inventive concept requires more than recognizing that each claim element, by itself, was known in the art . . . an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces.” Reply Br. 2 (citing *Bascom Glob. Internet Sers., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016)). Appellant contends that “Claim 1 recites the non-conventional and non-generic arrangement [of elements] to determine if a towing vehicle mode is applicable and to provide a route

guidance tailored for the towing vehicle mode if it has been determined that the towing vehicle mode is applicable.” Reply Br. 3–4. Appellant asserts that adding additional elements to a GPS system has been found patent eligible. Appeal Br. 11–13 (citing USPTO Subject Matter Eligibility Guidance, iss. Jan. 27, 2015 (“Guidance”)). Appellant concludes that because it is unconventional to use a sensor “to sense the second vehicle (towed vehicle) behind the first vehicle (towing vehicle),” and determine a towing route mode based on signals from the sensor, “the Claimed invention recites an inventive concept, a point of novelty sufficient to transform the idea into a patent eligible invention . . . [that] amounts to ‘significantly more’ than an abstract idea.” Reply Br. 4–5.

To determine whether a claim is directed to ineligible subject matter, we apply the two-step test explained in *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2355 (2014). First, we determine whether the claims at issue are directed to a patent-ineligible concept such as an abstract idea. *Id.* Next, we “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.” *Id.* at 2357 (citation omitted).

We agree with the Examiner that claim 1 is directed to the abstract idea of manipulating measured position data based on GPS. In this regard, “[w]ithout additional limitations, a process that employs mathematical algorithms to manipulate existing information to generate additional information is not patent eligible.” *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014).

As for step two, we look to whether the steps recited in claim 1, taken individually, and as an ordered combination, add enough to claim 1 to

transform the recited abstract idea into patent-eligible subject matter. Here, the Examiner finds that Appellant’s sensor senses an object and concludes that claim 1 does not recite an element or combination of elements that amounts to significantly more than a claim upon the abstract idea itself, but does not make any findings addressing how the information from the sensor is used in a conventional way, or how the arrangement of generic elements is conventional. *See* Ans. 5–6. By contrast, Appellant’s Specification states that “conventional navigation systems . . . do not consider if the vehicle is towing another car.” Spec. ¶ 2. When a vehicle is towing another vehicle, different speed limits or route restrictions must be taken into account. Spec. ¶¶ 2 and 3. Appellant addresses this shortcoming by using a sensor that senses an object behind a first vehicle, and automatically executes a towing route when the sensor recognizes a second vehicle behind the first vehicle. That is, Appellant provides a sensor that is not just sensing an object like existing driving information sensors 132 (*see* Spec. ¶ 23), it is an additional sensor that improves the functionality of the GPS compared to the prior art ways of providing GPS navigation.

This scenario is different from the one in *Digitech* because the claimed invention is not just manipulating conventional data data, but is using an additional sensor that provides new data that was not previously used in GPS navigation to improve the GPS functionality. According to *Bascom*, the installation of an Internet content filter at a particular network location was “a technical improvement over the prior art ways of filtering such content” because such an arrangement advantageously allows the Internet content filter to have “both the benefits of a filter on a local computer and the benefits of a filter on the ISP server” and “to give users the

ability to customize filtering for their individual network accounts.”

Bascom, 827 F.3d at 1350, 1352. As such, “an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces.” *Id.* at 1350.

In light of the description provided in Appellant’s Specification, the basis for the Examiner’s findings that the recited elements are arranged and “used in a routine and conventional way” is not apparent, and the Examiner has not adequately explained how sensing via an additional sensor is not a technical improvement to prior art GPS systems. *See* Ans. 4–6. We therefore reverse the Examiner’s rejection of claim 1 as directed to patent ineligible subject matter. As the Examiner did not provide additional analysis of any of claims 2–20, we reverse the Examiner’s rejection of these claims as well. *See* Final Act. 2–4.

DECISION

The Examiner’s decision to reject claims 1–20 under 35 U.S.C. § 101 is reversed.

REVERSED