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EXAMINER	
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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte YI YANG, LIANG DU, and DAWEI HE

Appeal 2018–003570[1]
Application 13/920,602
Technology Center 2800

Before BEVERLY A. FRANKLIN, MONTÉ T. SQUIRE and, JEFFREY B. ROBERTSON *Administrative Patent Judges*.

FRANKLIN, *Administrative Patent Judge.*

DECISION ON APPEAL

Appellants request our review under 35 U.S.C. § 134 of the Examiner's decision rejecting claims 1–23. We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

STATEMENT OF THE CASE

Claim 1 is illustrative of Appellants' claimed subject matter on appeal and is set forth below:

> A method of disaggregating and estimating power consumption of a plurality of electric loads powered by a single electrical outlet, the plurality of electric loads including

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[1] The real party in interest is Eaton Corporation. Appeal Br. 2

> electric loads from a plurality of different categories of electric loads, said method comprising:
>
> measuring a plurality of samples for one line cycle of an aggregated current waveform and a voltage waveform for said plurality of electric loads powered by said single electrical outlet;
>
> transferring by a processor said measured samples for said one line cycle into an aggregated voltage-current trajectory for said plurality of electric loads powered by said single electrical outlet;
>
> decomposing the aggregated voltage-current trajectory into a plurality of decomposed voltage-current trajectories each corresponding to one of the plurality of different categories of electric loads; and
>
> estimating power consumption for each different category of electric load powered by the single electrical outlet based on the decomposed voltage-current trajectories.

Appeal Br. 10 (Claims App.)

THE REJECTION

Claims 1–23 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more.

ANALYSIS

Upon consideration of the evidence and each of the respective positions set forth in the record, we find that the preponderance of evidence supports the Appellants' stated positon in the record, and we thus reverse the rejection for the reasons provide by Appellants in the record. We add the following for emphasis.

Appellants argue, *inter alia*, that instant claim 1 satisfies the second part of the two-step *Alice* test and therefore is patent-eligible. Appeal Br. 5–8; Reply Br. 3–5. In response, the Examiner refers to *Electric Power Group, LLC v. Alstom S.A.* 830 F.3d 1350 (Fed. Cir. 2016), and states that the elements of claims 1 and 21 are analogous to the fact pattern of the *Electric Power Group* decision. The Examiner refers to a quote from *Electric Power Group* on page 10 of the Answer, and concludes that claim 1 does not amount to significantly more than an abstract idea.

We agree with Appellants' reply that the Examiner's application of *Electric Power Group* is improper. As stated by Appellants on pages 3 and 4 of the Appeal Brief, to determine whether an invention claims ineligible subject matter, the Supreme Court has established a two-step framework. First, we must determine whether the claims at issue are directed to a patent-ineligible concept such as an abstract idea. *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2355 (2014). Second, if the claims are directed to an abstract idea, we must "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." *Id.* (quoting *Mayo*, 566 U.S. at 79). To transform an abstract idea into a patent-eligible application, the claims must recite "more than simply stating the abstract idea while adding the words 'apply it.'" *Id.* at 2357 (quoting *Mayo*, 566 U.S. at 72 (internal alterations omitted)).

Appellants correctly point out that the portion of *Electric Power Group* quoted by the Examiner addresses the first step of the two-step *Alice* test (i.e., whether the claim is directed to an abstract idea). Reply Br. 4. Appellants also point out that the Examiner improperly uses the quotation

directed to the first step of the *Alice* test to conclude that Appellants' claim 1 does not satisfy the second step of the *Alice* test (i.e., whether the claim includes 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). Appellants, thus, submit that the Examiner's conclusion that claim 1 does not satisfy the second part of the two-step *Alice* test is lacking and not supported by the quoted portion of *Electric Power Group*. Reply Br. 4.

As explained by Appellants on page 4 of the Reply Brief, the court in *Electric Power Group* continues beyond the portion quoted by the Examiner, and resolves whether the claims at issue passed the second part of the two-step *Alice* test. Ultimately, the court in *Electric Power Group* found that the claims at issue did not meet the second part of the two-step *Alice* test. In reaching this conclusion (that the claims at issue did not result in significantly more than an abstract idea), the court reasoned that "[t]he claims in this case do not even require a new source or type of information, or new techniques for analyzing it" and "they do not require an arguably inventive set of components or methods, such as measurement devices or techniques, that would generate new data. They do not invoke any assertedly inventive programming. Merely requiring the selection and manipulation of information to provide a 'humanly comprehensible' amount of information useful for uses by itself does not transform the otherwise abstract processes of information collection and analysis." *Electric Power Group*, 830 F.3d at 1355. Reply Br. 4–5.

In contrast to the claims at issue in *Electric Power Group*, Appellants argue that instant claim 1 presents a new and inventive technique. Reply Br.

5. Appellants state that at least the limitations of "decomposing the aggregated voltage-current trajectory into a plurality of decomposed voltage-current trajectories each corresponding to one of the plurality of different categories of electric loads; and estimating power consumption for each different category of electric load powered by the single electrical outlet based on the decomposed voltage-current trajectories," as recited in claim 1, present a new and inventive technique that allows a single voltage and current measurement taken from an electrical outlet to be used to determine the power consumption of each category of load connected to the electrical outlet without having to separately monitor the voltage and current of each category of load. Appellants then conclude that, unlike the claim at issue in *Electric Power Group*, instant claim 1 satisfies the second part of the two-step *Alice* test. Reply Br. 5. We are persuaded by such argument and reverse the rejection. *See also DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1258–59 (Fed. Cir. 2014).

DECISION

The rejection of claims 1–23 is reversed.

ORDER

REVERSED