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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DAVID J. HOMOKI

Appeal 2017-004319
Application 13/624,947
Technology Center 3600

Before JOHN A. JEFFERY, LARRY J. HUME, and
CATHERINE SHIANG, *Administrative Patent Judges*.

JEFFERY, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner's decision to reject claims 1–18. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

STATEMENT OF THE CASE

Appellant's invention determines whether customers are approved for a sale that is paid for with multiple payments over a sales period, where the approval is based on the customer's financial information, income, and

¹ Appellant identifies the real party in interest as David J. Homoki. App. Br. 3.

willingness to pay. *See generally* Abstract; Spec. ¶¶ 19–29. Claim 1 is illustrative:

1. A method comprising:
 - receiving a request to approve a customer for a sale to be paid for with multiple payments over a sales period;
 - providing a web-form to collect information from the customer;
 - collecting financial information of the customer by way of the web-form;
 - calculating a line of willingness-to-pay, the calculating by a computer system, where the line of willingness-to-pay is calculated based on a returns report and sales reported on a given day;
 - calculating a value indicative of modified income of the customer; and then
 - determining whether the customer is approved for the sale based on the line of willingness-to-pay, the value indicative of modified income of the customer, and the financial information of the customer; if the customer is approved determining terms of a payment plan for the sale; and
 - rendering for display, the terms of the payment plan, on the web-form.

THE REJECTIONS

The Examiner rejected claims 1–18 under 35 U.S.C. § 101 as directed to ineligible subject matter. Ans. 2–6.²

The Examiner rejected claims 1–18 under 35 U.S.C. § 103 as unpatentable over Abrahams (US 2012/0296806 A1; Nov. 22, 2012) and Nemat Shafik, *Economic Development and Environmental Quality: An*

² Throughout this opinion, we refer to (1) the Appeal Brief filed August 12, 2016 (“App. Br.”); (2) the Examiner’s Answer mailed November 29, 2016 (“Ans.”); and (3) the Reply Brief filed January 16, 2017 (“Reply Br.”).

Econometric Analysis, 46 OXFORD ECONOMIC PAPERS 757–73 (Oct. 1994) (“Shafik”). Ans. 7–12.

THE INELIGIBILITY REJECTION

The Examiner finds that the claimed invention is directed to an abstract idea, namely creating a contract for payment. Ans. 2, 12–13. According to the Examiner, the claimed elements do not add significantly more to the abstract idea to render the claimed invention patent-eligible. Ans. 3–6, 13–16.

Appellant argues that the claims are not directed to an abstract idea, but rather a particular and concrete method of handling a request to approve a customer to purchase an item, particularly given the Specification’s explanation of how (1) the recited “line of willingness-to-pay” is calculated, and (2) the claimed rules are used to calculate a customer’s specific payment plan. App. Br. 10–13; Reply Br. 1–3. Appellant adds that even if claim 1 was directed to an abstract idea, the claim nevertheless recites additional elements that add significantly more to the abstract idea by, among other things, (1) receiving a request to approve a customer for sale, (2) determining whether the customer is approved for sale based on the recited calculated line of willingness-to-pay, and (3) rendering the payment plan’s terms on a web-form. App. Br. 13–16; Reply Br. 1–4. According to Appellant, not only does claim 1 recite specific rules that improve methods of calculating a customer’s payment plan, but the claim also does not preempt all ways of creating a contract for payment. App. Br. 16; Reply Br. 1–4.

ISSUE

Has the Examiner erred in rejecting claims 1–18 by concluding that they are directed to ineligible subject matter under § 101? This issue turns on whether the claimed invention is directed to a patent-ineligible abstract idea and, if so, whether the recited elements—considered individually and as an ordered combination—transform the nature of the claims into a patent-eligible application of that abstract idea.

ANALYSIS

To determine whether claims are patent eligible under § 101, we apply the Supreme Court’s two-step test articulated in *Alice Corp. Proprietary Ltd. v. CLS Bank International*, 134 S. Ct. 2347 (2014). First, we determine whether the claims are directed to a patent-ineligible concept: laws of nature, natural phenomena, and abstract ideas. *Id.* at 2354–55. If so, we then proceed to the second step and examine the claim’s elements—both individually and as an ordered combination—to determine whether the claim contains an “inventive concept” sufficient to transform the claimed abstract idea into a patent-eligible application. *Id.* at 2357.

Alice Step One

Applying *Alice* step one, we agree with the Examiner that the claimed invention is directed to an abstract idea, namely creating a contract for payment. Ans. 2, 12–13. Independent claim 1 recites, in pertinent part, (1) receiving a request to approve a customer for a sale to be paid for with multiple payments over a sales period, (2) collecting the customer’s financial information via a web-form, and (3) calculating a line of willingness-to-pay

based on a returns report and sales reported on a given day. Claim 1 further recites determining whether the customer is approved for the sale based on (1) the line of willingness-to-pay, (2) a calculated value indicating the customer's modified income, and (3) the customer's financial information. Also, a payment plan's terms are determined and rendered for display on the web-form.

As noted above, a key aspect of this approval process is calculating a "line of willingness-to-pay" based on (1) a "returns" report, and (2) sales reported on a given day. According to the Specification, a "return" is an electronic debit or physical check presented to a customer's bank and subsequently rejected for payment. Spec. ¶ 11. Appellant's Figure 5 graphs (1) the total percentage of sales that are returns, and (2) the customer's willingness to pay over a 90-day period, where the two associated lines 502, 504 are linear regressions calculated from data in Figure 4. *Id.* ¶ 25. As shown in Figure 5, the percentage of returns increases during the sales period, thus indicating that a customer's desire to continue to pay for a possessed item declines over time. *Id.* ¶ 26. This declining desire is shown in line 504 whose downward slope reflects the customer's progressively-declining willingness to pay over time. *Id.* ¶ 27.

In essence, Appellant's claimed invention creates a payment contract by approving the customer based on certain customer-related factors, namely (1) the line of willingness-to-pay, (2) a calculated value indicating the customer's modified income, and (3) the customer's financial information. Despite Appellant's arguments to the contrary (App. Br. 10–13; Reply Br. 1–3), we agree with the Examiner that claim 1 is directed to an abstract idea, namely creating a payment contract, which is a fundamental economic

and business practice. *See* Ans. 2–3, 12–13. Such fundamental economic and business practices are often held to be abstract. *See, e.g., Alice*, 134 S. Ct. at 2356 (holding the concept of intermediated settlement is an abstract idea directed to a “fundamental economic practice long prevalent in our system of commerce”) (citation omitted); *see also buySAFE v. Google, Inc.*, 765 F.3d 1350, 1353–54 (Fed. Cir. 2014) (citing cases where contractual relations at issue constituted fundamental economic practices, and noting that forming or manipulating economic relations may involve an abstract idea); *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass’n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014) (explaining that claims directed to “the mere formation and manipulation of economic relations” and “the performance of certain financial transactions” have been held to involve abstract ideas).

Furthermore, it well settled that collecting information is within the realm of abstract ideas—even when the information is limited to particular content. *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016). It is also well settled that analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, are essentially mental processes within the abstract idea category. *Id.* at 1354. And merely presenting the results of abstract processes of collecting and analyzing information, without more (such as identifying a particular tool for presentation), is abstract as an ancillary part of such collection and analysis. *Id.*

Similar to the claims at issue in *Electric Power*, the claimed invention here gathers, manipulates, analyzes, and presents information of a specified content, but does not use any particular inventive technology for performing

those functions. That the information pertains to a customer's finances and a payment plan is of no consequence here, for collecting and analyzing information such information does not make the collection and analysis non-abstract. *See SAP America, Inc. v. Investpic, LLC*, 890 F.3d 1016, 1021 (Fed. Cir. 2018).

We, therefore, agree with the Examiner that the claimed invention is directed to an abstract idea.

Alice Step Two

Nor do the recited elements—considered individually and as an ordered combination—transform the nature of claim 1 into a patent-eligible application of the abstract idea to ensure that the claim amounts to significantly more than that idea. *See Alice*, 134 S. Ct. at 2357.

That the recited method includes a “web-form” and a computer system does not change our conclusion. As the Examiner indicates, the claimed invention merely uses generic computing components to perform the recited abstract idea. Ans. 5, 13–14. *See Mortgage Grader Inc. v. First Choice Loan Services, Inc.*, 811 F.3d 1314, 1324–25 (noting that components such an “interface,” “network,” and “database” are generic computer components that do not satisfy the inventive concept requirement); *see also Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1370 (Fed. Cir. 2015) (“[T]he interactive interface limitation is a generic computer element); *buySAFE*, 765 F.3d at 1355 (“That a computer receives and sends the information over a network—with no further specification—is not even arguably inventive.”).

Indeed, these generic computing components merely do that which can be performed mentally or with a pen and paper—exclusive functions ineligible for patent protection under § 101. *See CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372 (Fed. Cir. 2011). That the Specification acknowledges in paragraph 48 that the recited calculations and analysis can be performed by a human using only pencil and paper only further bolsters the Examiner’s findings and conclusions in this regard. *Accord* Ans. 13 (noting this point).

Nevertheless, even if these the recited components add efficiency as noted in the Specification’s paragraph 48,³ any speed increase comes from the capabilities of the generic computer components—not the recited process itself. *See FairWarning IP, LLC v. Iatric Systems, Inc.*, 839 F.3d 1089, 1095 (Fed. Cir. 2016) (citing *Bancorp Services, LLC v. Sun Life Assurance Co.*, 687 F.3d 1266, 1278 (Fed. Cir. 2012) (“[T]he fact that the required calculations could be performed more efficiently via a computer does not materially alter the patent eligibility of the claimed subject matter.”)). Like the claims in *FairWarning*, the focus of claim 1 is not on an improvement in computer processors as tools, but on certain independently abstract ideas that use generic computing components as tools. *See FairWarning*, 839 F.3d at 1095 (citations and quotation marks omitted).

In short, merely reciting these generic computing components cannot transform a patent-ineligible abstract idea into a patent-eligible invention.

³ According to the Specification’s paragraph 48, the claimed invention reduces the time needed to perform the requisite calculations and analysis to at least one quarter of the time required to perform those tasks “by hand,” namely using pencil and paper.

Id. at 2358. In other words, merely reciting an abstract idea while adding the words “apply it with a computer” does not render an abstract idea non-abstract: there must be more. *See Alice*, 134 S. Ct. at 2359. Nor does the claimed invention improve the computer processor device’s functionality or efficiency, or otherwise change the way that device functions. *Cf. Enfish LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016).

Appellant’s reliance on *McRO, Inc. v. Bandai Namco Games America, Inc.*, 837 F.3d 1299 (Fed. Cir. 2016) (Reply Br. 1–4) is unavailing. There, the claimed process used a combined order of specific rules that rendered information in a specific format that was applied to create a sequence of synchronized, animated characters. *McRO*, 837 F.3d at 1315. Notably, the recited process *automatically animated characters* using particular information and techniques—an improvement over manual three-dimensional animation techniques that was not directed to an abstract idea. *Id.* at 1316.

Unlike *McRO*, the claimed invention here creates a payment contract by approving the customer based on certain customer-related factors, namely (1) the line of willingness-to-pay, (2) a calculated value indicating the customer’s modified income, and (3) the customer’s financial information. Although these steps may be beneficial, a claim for a useful or beneficial abstract idea is still an abstract idea. *See Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379–80 (Fed. Cir. 2015).

That a web-form is used to collect a customer’s financial information and render the payment plan’s terms for display is of no consequence here, for these data gathering and display elements are merely insignificant extra-solution activity that do not add significantly more to the abstract idea to

render the claimed invention patent-eligible. *See In re Bilski*, 545 F.3d 943, 962 (Fed. Cir. 2008) (*en banc*), *aff'd on other grounds*, 561 U.S. 593 (2010) (“[T]he involvement of the machine or transformation in the claimed process must not merely be insignificant extra-solution activity.”); *see also Bilski* at 545 F.3d at 963 (characterizing data gathering steps as insignificant extra-solution activity); *Parker v. Flook*, 437 U.S. 584, 590 (1978) (insignificant post-solution activity found to be insufficient to impart patentability). *Accord Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1242 (2016) (same). And, as noted previously, merely presenting the results of abstract processes of collecting and analyzing information, without more (such as identifying a particular tool for presentation), is abstract as an ancillary part of such collection and analysis. *Elec. Power* 830 F.3d at 1354.

Lastly, we find unavailing Appellant’s contention the Examiner also failed to show that the claims preempt all ways of creating a contract for payment. App. Br. 16. Where, as here, the claims cover a patent-ineligible concept, preemption concerns “are fully addressed and made moot” by an analysis under the *Alice* framework. *See Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015).

For the foregoing reasons, then, the recited elements—considered both individually and as an ordered combination—do not contain an “inventive concept” sufficient to transform the claimed abstract idea into a patent-eligible application. Therefore, we are not persuaded that the Examiner erred in rejecting claims 1–18 under § 101.

THE OBVIOUSNESS REJECTION

The Examiner finds that Abrahams discloses many recited elements of claim 1 including, among other things, calculating a line of willingness-to-pay, and determining whether the customer is approved for the sale based on the recited factors. Ans. 7–10. Although the Examiner acknowledges that Abrahams' disclosed willingness to pay is a function of payment history, the Examiner cites Shafik for teaching determining a consumer's willingness to pay based on average capital income in concluding that the claim would have been obvious. Ans. 9–10.

Appellant argues that not only does the Examiner fail to address the claim language, the Examiner's reliance on Shafik is improper because it is non-analogous art. App. Br. 16–21. Appellant adds that Abrahams' willingness to pay is based solely on past payment history and, therefore, does not teach or suggest calculating a line of willingness-to-pay based on a returns report and sales on a given day as claimed. App. Br. 21–24.

ISSUES

(1) Under § 103, has the Examiner erred in rejecting claim 1 by finding that Abrahams and Shafik collectively would have taught or suggested calculating a line of willingness-to-pay based on a returns report and sales on a given day?

(2) Is the Examiner's proposed combination of the cited references supported by articulated reasoning with some rational underpinning to justify the Examiner's obviousness conclusion? This issue turns on whether Shafik is analogous art.

ANALYSIS

We begin by noting that the last two steps in claim 1 are performed *if* the customer is approved and are, therefore, directed to conditional limitations that need not be satisfied to meet the claim. *See Ex parte Schulhauser*, No. 2013-007847, 2016 WL 6277792 (PTAB Apr. 28, 2016) (precedential); *see also* MANUAL OF PATENT EXAMINING PROCEDURE (MPEP) § 2111.04(II) (9th ed. Rev. 08.2017, Jan. 2018) (citing *Schulhauser*). However, the broadest reasonable interpretation of an apparatus claim with structure that performs a function, which only needs to occur if a condition precedent is met, still requires structure for performing the function should the condition occur. *Schulhauser* at 14–15. Therefore, our interpretation of system claim 7 and medium claim 13 differs from method claim 1 because the structure, namely the processor configured to perform the recited functions, is present in the system regardless of whether the condition is met and the function is actually performed.

Turning to the rejection, the key disputed aspect of claim 1 centers on the recited *line* of willingness-to-pay calculation—a linear calculation based on two factors: (1) a returns report, and (2) sales reported on a given day. Our emphasis underscores that claim 1 recites explicitly that a *line* of willingness to pay is calculated—not a *value* indicative of willingness to pay as the Examiner finds. *See* Ans. 18.

This calculated line is described in connection with Appellant’s Figure 5 that graphs (1) the total percentage of sales that are returns, and (2) the customer’s willingness to pay over a 90-day period, where the two associated lines 502, 504 are linear regressions calculated from data in Figure 4. Spec. ¶ 25. As shown in Figure 5, the percentage of returns

increases during the sales period, thus indicating that a customer's desire to continue to pay for a possessed item declines over time. *Id.* ¶ 26. This declining desire is shown in line 504 whose downward slope reflects the customer's progressively-declining willingness to pay over time. *Id.* ¶ 27.

Given the function of this *linear* willingness-to-pay calculation and representation in the context of the disclosed invention, the Examiner's gloss on this linear calculation is dubious on this record, including the two recited factors on which this calculation is based. In the rejection, the Examiner acknowledges that Abrahams' disclosed willingness to pay is a function of payment history, but then finds that Abrahams' willingness to pay is apparently not based on (1) a proposed sale price, and (2) a value indicating the customer's modified income. *See* Ans. 9. The Examiner then cites Shafik for teaching determining a consumer's willingness to pay *based on average capital income*. *Id.*

But the recited willingness-to-pay line is not calculated based on these factors, but rather (1) a returns report, and (2) sales reported on a given day. To the extent that the Examiner concludes that Abrahams' using past payment history to determine a customer's willingness to pay somehow renders these two factors obvious either alone or in light of Shafik (*see* Ans. 9–10), we disagree.

Indeed, Shafik has nothing to do with creating payment contracts, let alone creating those contracts by approving the customer based on certain customer-related factors. Rather, Shafik is a high-level report analyzing relationships between economic growth and environmental quality, including environmental degradation such as pollution. *See* Shafik 757–58. Although Shafik refers to the willingness to pay where survival is at stake

and to avert damage on page 757, this willingness to pay has nothing to do with approving a customer for a payment plan in connection with a sale as in the present invention, let alone calculating a line of willingness-to-pay as part of that approval process.

Prior art is analogous if it is (1) from the same field of endeavor regardless of the problem addressed, or (2) reasonably pertinent to the particular problem with which the inventor is involved. *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004). Here, Shafik is not from Appellant's field of endeavor, namely loan qualification, nor is Shafik reasonably pertinent to Appellant's problem of determining whether a customer is approved for a sale based on, among other things, a line of willingness-to-pay. Although Shafik pertains to economics generally as the Examiner indicates (Ans. 17), Shafik has nothing to do with Appellant's loan-based field of endeavor, nor is the reference reasonably pertinent to Appellant's problem of approving customers for sales. Shafik is, therefore, non-analogous art and, as such, the Examiner's obviousness rejection is deficient for this additional reason.

Therefore, we are persuaded that the Examiner erred in rejecting (1) independent claim 1; (2) independent claims 7 and 13 that recite commensurate limitations; and (3) the dependent claims for similar reasons. Because this issue is dispositive regarding our reversing the Examiner's rejection of these claims, we need not address Appellant's other associated arguments.

CONCLUSION

The Examiner did not err in rejecting claims 1–18 under § 101, but erred in rejecting those claims under § 103.

DECISION

We affirm the Examiner's decision to reject claims 1–18. Because the rejection of each appealed claim is affirmed on at least one of the grounds specified in the Office Action from which the appeal was taken, the Examiner's decision to reject claims 1–18 is affirmed. *See* 37 C.F.R. § 41.50(a)(1).

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). *See* 37 C.F.R. § 41.50(f).

AFFIRMED