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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MATTHEW B. SHOEN, JEAN-PHILLIPPE KHODARA, and
SWAMINATHAN PALANI

Appeal 2016-006151
Application 10/784,719
Technology Center 3600

Before MURRIEL E. CRAWFORD, HUBERT C. LORIN, and
ANTON W. FETTING, *Administrative Patent Judges*.

CRAWFORD, *Administrative Patent Judge*.

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DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant(s) seek our review under 35 U.S.C. § 134 of the Examiner's final decision rejecting claims 1-5, 35-43, 48, 51, 52, 57-65, 70-85, 115-123, 128, 131, 132, 137-145, 150-160, 162 and 166 . We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

BACKGROUND

Appellants' invention is directed to a superstructure pool computer system. Spec. 1

Claim 1 is illustrative

1. A method of digitally applying a data structure when determining participation in a pooling superstructure, the method including the steps of:

after forming a pool to handle an obligation that is a financial liability over a period of time in exchange for revenue, digitally accessing a data structure in a computer system programmed to implement a pooling superstructure, the data structure configured to comprise, and containing data comprising , rules governing member participation in the pool, the rules including:

minimum criteria for maintaining in the pool, and the

a requirement that at least one member of the pool assumes a larger share of the obligation in the event at least one other member of the pool has a reduced share of obligation such that the sum of the shares equals one hundred percent, a process and terms for adding a new member; and

applying the data structure and rules, with the computer systems, when digitally determining the participation within the period of time, said determining comprising:

monitoring members of the pool for compliance with said rules and,

in event of an application for membership in the pool, analyzing the application for compliance with said rules, and.

detecting for failure of any said member to maintain the minimum criteria for membership in the pool; and

generating, with the computer system, output indicative of the participation in the pooling superstructure.

The Examiner relies on the following prior art reference as evidence of unpatentability:

Walker et al. US 6,119,093 Sept. 12, 2000

Sam McCord et al., *Partnership: If There's A Beginning . . . There's An End*, 37 The National Public Account 18-22 (Apr. 1992) ("McCord")

Appellant(s) appeal the following rejection(s):

Claims 1-5, 35-43, 48, 51, 52, 57~55, 70-85, 115-123, 128, 131, 132, 137-145, 150-160, 162, and 166 are rejected under 35 U.S.C. § 101.

Claims 1-5, 35-43, 48, 51, 52, 57-65, 70-85, 115-123, 128, 131, 132, 137-145, 150-160, 162 and 166 are rejected under 35 U.S.C. 103(a) as unpatentable over Walker and f3d McCord.

PRINCIPLES OF LAW

An invention is patent-eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. The Supreme Court, however, has long interpreted § 101 to include implicit exceptions: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *E.g., Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S.Ct. 2347, 2354 (2014).

In determining whether a claim falls within the excluded category of abstract ideas, we are guided in our analysis by the Supreme Court’s two-

step framework, described in *Mayo* and *Alice*. *Id.* at 2355 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1296–97 (2012)). In accordance with that framework, we first determine whether the claim is “directed to” a patent-ineligible abstract idea. *See Alice*, 134 S. Ct. at 2356 (“On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk.”); *Bilski v. Kappos*, 561 U.S. 593, 611 (2010) (“Claims 1 and 4 in petitioners’ application explain the basic concept of hedging, or protecting against risk.”); *Diamond v. Diehr*, 450 U.S. 175, 184 (1981) (“Analyzing respondents’ claims according to the above statements from our cases, we think that a physical and chemical process for molding precision synthetic rubber products falls within the § 101 categories of possibly patentable subject matter.”); *Parker v. Flook*, 437 U.S. 584, 594–595 (1978) (“Respondent’s application simply provides a new and presumably better method for calculating alarm limit values.”); *Gottschalk v. Benson*, 409 U.S. 63, 64 (1972) (“They claimed a method for converting binary-coded decimal (BCD) numerals into pure binary numerals.”).

The patent-ineligible end of the spectrum includes fundamental economic practices, *Alice*, 134 S. Ct. at 2357; *Bilski*, 561 U.S. at 611; mathematical formulas, *Parker*, 437 U.S. at 594–95; and basic tools of scientific and technological work, *Gottschalk*, 409 U.S. at 69. On the patent-eligible side of the spectrum are physical and chemical processes, such as curing rubber, *Diamond*, 450 U.S. at 184 n.7, “tanning, dyeing, making waterproof cloth, vulcanizing India rubber, smelting ores,” and a process for manufacturing flour, *Gottschalk*, 409 U.S. at 69.

In addition, the Federal Circuit has held that if a method can be performed by human thought alone, or by a human using pen and paper, it is merely an abstract idea and is not patent-eligible under § 101. *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1373 (Fed. Cir. 2011) (“[A] method that can be performed by human thought alone is merely an abstract idea and is not patent-eligible under § 101.”).

Claims involving data collection, analysis, and display are directed to an abstract idea. *Elec. Power Grp. LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (holding that “collecting information, analyzing it, and displaying certain results of the collection and analysis” are “a familiar class of claims ‘directed to’ a patent-ineligible concept”); *see also In re TLI Comma ‘ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016); *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093-94 (Fed. Cir. 2016). Claims that use a generic computer technology to perform data collection, analysis, and display and does not recite an improvement to a particular computer technology are directed to an abstract idea. *See, e.g., McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314-15 (Fed. Cir. 2016) (finding claims not abstract because they “focused on a specific asserted improvement in computer animation”).

If the claim is “directed to” a patent-ineligible abstract idea, we then consider the elements of the claim—both individually and as an ordered combination—to assess whether the additional elements transform the nature of the claim into a patent-eligible application of the abstract idea. *Alice*, 134 S. Ct. at 2355. This is a search for an “inventive concept”—an element or combination of elements sufficient to ensure that the claim amounts to “significantly more” than the abstract idea itself. *Id.*

ANALYSIS

Rejection under 35 U.S.C. §101

In the Final Rejection, the Examiner holds that claim 1 is directed to a method of how to determine participation and membership in a pool to handle monetary obligations and that this is an abstract idea. Fin. Act. 14. The Examiner found that the recitations in the claim in addition to the abstract idea amount to little more than reciting that the computer system applies the abstract idea. Fin. Act. 14. In regard to the remaining claims, the Examiner held that these claims include subject matter that is recited in claim 1 and either further define the rules used to determine participation in the pool or further define the defining step and are therefore also directed to an abstract idea and do not add significantly more than the abstract idea. Fin. Act. 15. We agree.

In addition to the above, the steps of claim 1 of applying a data structure and rules with a computer system, monitoring members for compliance with rules, analyzing application compliance with rules, detecting the failure of members to comply with the rules and generating an output are essentially the collection, analysis and displaying of data which as noted above has been found to be an abstract idea. As such, the claims are directed to an abstract idea on this basis as well.

We are not persuaded of error on the part of the Examiner by Appellants argument that the Examiner failed to present a *prima facie* evidence of preemption. “While preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate

patent eligibility.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015); *see also OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362-63 (Fed. Cir. 2015), cert. denied, 136 S. Ct. 701, 193 (2015) (“[T]hat the claims do not preempt all price optimization or may be limited to price optimization in the e-commerce setting do not make them any less abstract.”). And, “[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*, 788 F.3d at 1379.

Appellants argument that the finding that the claims are directed to an abstract idea is not supported by evidence is also not persuasive.

Consideration of evidence in making a determination under the first step of the *Alice* framework has merit. *See Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229 (Fed. Cir. 2016). But there is no requirement that examiners must provide evidentiary support in every case before a conclusion can be made that a claim is directed to an abstract idea. All that is required of the Office is that it set forth the statutory basis of the rejection in a sufficiently articulate and informative manner as to meet the notice requirement of § 132. *See In re Jung*, 637 F.3d 1356, 1362 (Fed. Cir. 2011); *Chester v. Miller*, 906 F.2d 1574, 1578 (Fed. Cir. 1990) (noting that section 132 “is violated when a rejection is so uninformative that it prevents the applicant from recognizing and seeking to counter the grounds for rejection”).

Evidence may be helpful in certain situations but it is not always necessary. It is not necessary in this case because the claims are clearly directed to the collection, analysis and display of data which has been held to be an abstract idea.

We are not persuaded of error on the part of the Examiner by Appellants argument that the rejection is ambiguous because the Office Action does not make it clear whether the abstract idea of how to determine participation and membership in a pool to handle monetary obligations relates to applying data structure and rules, monitoring members, detecting for a failure. Appellants state that the Examiner advances different articulations of the abstract idea. We do not agree. In our view each of each of the steps above is part of the abstract idea of determining membership in a pool. In addition, each of these steps relate to the collection, analysis and display of data. Therefore, the rejection is not ambiguous.

We are no persuaded of error on the part of the Examiner because the method of the claims cannot be done entirely by a human mind because the Examiner does not rest the determination that the claims are directed to an abstract idea on the holding that the steps of the claims can be done entirely by a human mind. As we discussed above, the claims are determined to be directed to the abstract idea of determining participation in a pool and a method involving the collection, analysis and display of data. We note that it is not necessary that the Examiner delimit the precise contours of the “abstract ideas” category in this case as being a fundamental economic practice or a method that can be done by the human mind. *See Alice Corp. Pty. Ltd.*, 134 S. Ct. at 2357. It is enough to recognize that there is no meaningful distinction in the level of abstraction between the concept of an intermediated settlement in *Alice* and the concept of determining participation in a pool by collecting, analyzing and displaying data. Both are squarely within the realm of “abstract ideas” as the Court has used that term.

We are not persuaded of error on the part of the Examiner by Appellants argument that the Examiner failed to include supporting evidence that the claim elements are routine or conventional. In the second step of the analysis, the Examiner found that the additional elements of the claim in addition to the abstract idea did not amount to significantly more than the abstract idea because the recitations are little more than reciting that the computer system applies the abstract idea. Fin. Act. 14. Using a computer to analyze data by utilizing stored data (i.e. the claimed data structure and rules) to analyze compliance with the rules and generate an output in response to this analysis is one of the most basic functions of a computer. *See Elec. Power Grp v. Alstom S.A.*, supra. In this regard, Appellants' own Specification provides evidence that this is accurate by disclosing that generic off the shelf computers and components i.e. a Toshiba monitor, and Intel Pentium series processor, a Hewlett Packard keyboard, a Hewlett Packard printer, and a modem or wireless connection can be used to implement the steps of the invention. Spec. 32. We note that in *Berkheimer v. HP Inc.*, 890 F.3d 1360, 1369 (Fed. Cir. 2018), the court held that “[t]he patent eligibility inquiry may contain underlying issues of fact.” *Berkheimer*, 881 F.3d 1365 (quoting *Mortgage Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1325 (Fed. Cir. 2016) (“The § 101 inquiry ‘may contain underlying factual issues.’”)). The court also held “[w]hen there is no genuine issue of material fact regarding whether the claim element or claimed combination is well-understood, routine, [and] conventional to a skilled artisan in the relevant field, this issue can be decided on summary judgment as a matter of law.” *Id.* at 1368. In the instant case there is no genuine issue of material fact.

Appellants also argue that the Examiner failed to provide sufficient evidence that the step of applying a data structure is conventional or routine. We agree with the Examiner that step of applying a data structure and rules is part of the abstract idea and is not considered in the second step of the analysis. The Examiner correctly considered whether the recitation in the claims related to the recited “computer system” applying a data structure is conventional or routine.

We also find no error in the Examiner’s finding that the claims do not recite an improvement to the functionality of the computer. There is a fundamental difference between computer functionality improvements, on the one hand, and uses of existing computers as tools to perform a particular task, on the other. Indeed, the Federal Circuit applied this distinction in *Enfish, LLC v. Microsoft Corp*, 822 F.3d 1327 (Fed. Cir. 2016) in rejecting a § 101 challenge at the step one stage in the *Alice* analysis because the claims at issue focused on a specific type of data structure, i.e., a self-referential table for a computer database, designed to improve the way a computer carries out its basic functions of storing and retrieving data, and not on asserted advances in uses to which existing computer capabilities could be put. *Id.* at 1335-36. In the present case, a general computer is used to apply a data structure and this finding is clearly supported by the Specification. We note that we do not find the JPTOS articles submitted by the Appellants relevant to the question of whether the instant claims recite an improvement to computer technology because the articles do not discuss the claimed invention.

We have considered the other arguments made by the Appellants but do not find them persuasive of error on the part of the Examiner.

In view of the foregoing, we will sustain the Examiner's rejection of claim 1. We will also sustain the Examiner's rejections of the remaining claims subject to this rejection because the Appellants do not argue the separate eligibility of these claims.

Rejection under 103

We will not sustain the rejection of claim 1 under 35 U.S.C. §103 because we agree with the Appellants that the prior art does not disclose applying rules which require that at least one member of the pool assumes a larger share of the obligation in the event at least one other member of the pool has a reduced share such that the shares equal one hundred percent.

The Examiner recognizes that his subject matter is not disclosed in Walker and relies on the teaching in McCord that at dissolution, a partnership may be continued as a new partnership including remaining partners.

We find that Walker discloses a system that forms an insurance syndicate with individual investors. (Col. 1, ll. 14-16). Each investor pledges an unused credit line as collateral for an investment (Col. 2, ll. 46-48). The amount of the credit line is frozen for the amount of the investment. (col. 5, ll. 13-15). The syndicate can cover all or a part of the total amount of coverage. (col. 6, ll. 64-67). If the syndicate covers a part of the total amount, the remaining amount is covered by the company. When a claim is filed the company draws on the credit line of each investor's credit card for the appropriate percentage of the amount paid out by the company.

If an investor cancels his or her credit card, the bank that issued the card notifies the syndication service which subsequently cancels the investor's stake in the policy. (col. 5, l. 66 to col. 6, l. 4).

We agree with the Appellants that as Walker relates to individual investors whose investments are limited to their individual credit lines, one of ordinary skill in the art would have no reason to modify Walker so that at least one investor assumes a larger share if one investors has a reduced obligation. The system in Walker requires an action by the investor so that any increase by any one investor would require an increased pledge by the investor and would not happen automatically in the event that one other investor's share is reduced.

In view of the foregoing, we will not sustain the Examiner's rejection of claim 1 and the claims dependent therefrom. We will also not sustain the rejection as it is directed to claim 81 and the claims dependent therefrom for the same reasons.

We will not sustain the remaining rejections for the same reasons.

DECISION

We affirm the Examiner's § 101 rejection.

We do not affirm the Examiner's § 103 rejections.

TIME PERIOD

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) (2009).

ORDER

AFFIRMED