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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte CONNIE NICHOLS and COURTNEY ARMSTRONG

Appeal 2018-006252
Application 12/604,326¹
Technology Center 3600

Before ROBERT E. NAPPI, ST. JOHN COURTENAY III, and
CARL L. SILVERMAN, *Administrative Patent Judges*.

SILVERMAN, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1–6, which constitute all pending claims. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

¹ The real party in interest is identified as Blackrock, Inc. Appeal Br. 2.

STATEMENT OF THE CASE

The invention relates to a system for calculating estimated Social Security benefits for married couples. Abstract; Spec. 1:12–15, 3:15–19, 6:4–17, Fig. 1. Claim 1, reproduced below, is exemplary of the subject matter on appeal (emphasis added):

1. A system for calculating estimated Social Security benefits for a married couple, the system comprising:
 - a benefits estimator server;*
 - a rules database networked coupled to and separate from the benefits estimator server configured to automatically update to reflect change in rules regarding calculation of social security benefits wherein the rules database is coupled to the benefits estimator server via a network;*
 - a user device coupled, via a network, to the benefits estimator server via the Internet;*
 - a user interface provided by the benefits estimator server, the user interface being configured to receive input from the user device and to display content on the a display provided on a display provided on the user device;*
 - a calculator provided by the benefits estimator server configured to receive input data from the user interface and to receive social security calculation rules from the rules database and is further configured to output data to the user display based on the received input data and social security calculation rules, wherein the input data includes data regarding both a primary earner and a secondary earner in a married couple, including an estimated age of death for both the primary earner and the secondary earner, and wherein the output data includes benefits for a plurality of Social Security benefits categories for the married couple including:*
 - a value when both the primary and the secondary earner take benefits at age 62;*
 - a value when both the primary and the secondary earner take benefits at full retirement age;*
 - a value when both the primary and the secondary earner take benefits at age 70; and*
 - a value when the married couple employs a hybrid approach wherein the secondary earner collects a reduced benefit at age 62 and*

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a spousal benefit at full retirement age, and wherein the primary earner collects benefits at age 70.

Appeal Br. 16–17 (Claims Appendix).

THE REJECTIONS

Claims 1–6 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to patent-ineligible subject matter. Final Act. 2–7.

ANALYSIS

We have reviewed the Examiner’s rejection in light of Appellants’ contentions and the evidence of record. We concur with Appellants’ contentions that the Examiner erred in this case.

Patent-eligible subject matter is defined in 35 U.S.C. § 101 of the Patent Act, which recites:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

There are, however, three judicially created exceptions to the broad categories of patent-eligible subject matter in 35 U.S.C. § 101: “[l]aws of nature, natural phenomena, and abstract ideas.” *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014) (quotation marks and citation omitted); *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 70 (2012) (brackets in original).

In determining whether a claim falls within an excluded category, we are guided by the Supreme Court’s two-step framework, described in *Mayo* and *Alice*. See *Alice*, 573 U.S. at 217–18 (citing *Mayo*, 566 U.S. at 75–77). In accordance with that framework, we first determine what concept the

claim is “directed to.” *See id.* at 219 (“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.”); *see also 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.”).

Concepts determined to be abstract ideas, and thus patent ineligible, include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 69 (1972)). Concepts determined to be patent eligible include physical and chemical processes, such as “molding rubber products” (*Diamond v. Diehr*, 450 U.S. 175, 191 (1981)); “tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores” (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. 252, 267–68 (1854))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

In *Diehr*, the claim at issue recited a mathematical formula, but the Supreme Court held that “[a] claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula.” *Diehr*, 450 U.S. at 187; *see also id.* at 191–92 (“We view respondents’ claims as nothing more than a process for molding rubber products and not as an attempt to patent a mathematical formula.”). Having said that, the Supreme Court also indicated that a claim “seeking patent protection for that formula in the abstract . . . is not accorded the protection of our patent laws, . . . and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological

environment.” *Id.* (citing *Benson and Flook*); *see, e.g., id.* at 187 (“It is now commonplace that an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.”).

If the claim is “directed to” an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, where “we must 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.” *Alice*, 573 U.S. at 221 (citation). “A claim that recites an abstract idea must include ‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’” *Id.* (quoting *Mayo*, 566 U.S. at 77, (alteration in original)). “[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention.” *Id.*

The United States Patent and Trademark Office (“USPTO”) recently published revised guidance on the application of § 101. USPTO, 2019 *Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50 (Jan. 7, 2019) (“Guidance”). Under that guidance, we first determine whether the claim recites:

- (1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity such as a fundamental economic practice, or mental processes); and
- (2) additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h)).

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look to whether the claim:

(3) adds a specific limitation beyond the judicial exception that is not “well-understood, routine, conventional” in the field (*see* MPEP § 2106.05(d)); or

(4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

See Guidance, 84 Fed. Reg. at 54–56.

Turning to Step 2B of the Guidance, “[t]he second step of the *Alice* test is satisfied when the claim limitations ‘involve more than performance of []well-understood, routine, [and] conventional activities previously known to the industry.’” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1367 (Fed. Cir. 2018) (quoting *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1347–48 (Fed. Cir. 2014) and *Alice*, 573 U.S. at 225). “Whether something is well-understood, routine, and conventional to a skilled artisan at the time of the patent is a factual determination.” *Berkheimer*, 881 F.3d at 1369.

We have reviewed Appellants’ claims and contentions in detail and in light of current precedent and guidance (*supra*). We find Appellants have raised a dispositive issue with respect to the Examiner’s Step 2B Eligibility Analysis. Accordingly, we need not present a detailed claim construction or analysis under the 2019 Revised Guidance Step 2A. We need address only whether the Examiner has provided a proper rejection under Step 2B.

The § 101 Rejection of claims 1–6

In the Final Action, the Examiner determines the claims are ineligible because they are directed to the abstract idea of calculating social security benefits which constitutes a mathematical relationship. Final Act. 2–3. The Examiner further determines the high level generic computer functions do

not add significantly more to render the claims patent eligible. *Id.* at 5–6. According to the Examiner, “[t]he benefit estimator server is recited at a high level of generality and its broadest reasonable interpretation comprises only a microprocessor, memory and estimator to simply perform the generic computer functions of receiving and processing information. Generic computers performing generic computer functions, alone, do not amount to significantly more than the abstract idea.” *Id.* at 3. The Examiner determines that “a user device as recited is a generic computer component that performs functions (i.e., calculate data and output data) that are well-understood, routine, and conventional activities previously known to the industry” and “which do not add meaningful limitations to the idea of calculating estimated Social Security benefits for a married couple beyond generally linking the system to a particular technological environment, that is, implementation via computers.” *Id.* at 4–5.

Appellants argue the Examiner ignores that claim 1 recites “at least three separate computing devices . . .” and argue that “claim 1 set[s] forth a novel computing system (as demonstrated by the lack of any prior art references teachings or suggesting such [a] system) *having at least three separate computing devices providing an improved database architecture enabling flexibility in data management for estimating social security benefits.*” *Id.* at 8 (citing Spec., Fig. 1). In particular, Appellants argue “[b]ased on the above architecture of the present application, the claims set forth a computer system that is beyond a mere abstract idea as it is clearly directed to an improvement in computer-related technology via the novel computing system. . . .” *Id.* at 10.

Appellants further argue the Examiner does not present the required prima facie case for the rejection. *Id.* at 13–14.

In the Answer, the Examiner states:

In the current claim limitation, the database is a generic database. The appellant has not improved the database or the server. In the current limitation, the computing devices are generic computing devices. The appellant's has not improved the computing devices. The appellant has not improved the conventional calculator. Moreover, it is to be noted that unlike rejections under 102 and 103 which are evidenced base, rejections under Alice 101 is not evidence based but rather is a matter of law and such, no tangible evidence or examples are required.

Ans. 2–3.

In the Reply Brief, Appellants reiterate that the Examiner oversimplifies the claim, and points out the significance of the “at least three separate computing devices.” Reply Br. 3–4. Appellants argue:

It is not proper for the Examiner to make a boilerplate rejection by asserting a claimed feature is well-understood, routine and conventional absent any support. As explained in the USPTO memorandum issued April 19, 2018, and responsive to *Berkheimer v. HP Inc.*, 881 F.3d 1360 (Fed. Cir. 2018), if the Examiner believes the claimed elements are routine and conventional, the Examiner is mandated to factual support that it is indeed common knowledge in the field as the Federal Circuit held that “[w]hether something is well-understood, routine, and conventional to a skilled artisan at the time of the patent is a factual determination.” *Id.* at 1369[.]

Appellant has argued and explained to the Examiner in its Appeal Brief that the claimed feature of *having at least three separate computing devices providing an improved database architecture enabling flexibility in data management for estimating social security benefits* is unique and advantageous and certainly not “well-understood, routine and conventional.” Nevertheless, the Examiner continues to maintain the position that it is merely a “generic database” without any factual support.

Reply Br. 4–5.

In this case, the Examiner makes factual findings about elements of the claims and asserts “[t]here is no requirement to provide evidence. Unlike 102 and 103, which is evidenced based, 101 is a question of law and evidence is not required.” Ans. 3–5. Appellants argue that “the claimed features of independent claim 1 are not ‘routine and conventional’ and the examiner has certainly not meet his burden to prove otherwise.” Reply Br. 5.

We agree with Appellants, because the Examiner has not provided sufficient evidence required by *Berkheimer* to support the “routine and conventional” factual findings. *See Berkheimer*, 881 F.3d at 1369. In particular, the Memorandum of Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*) (“*Berkheimer* Memorandum”) requires the information listed below:

1. A citation to an express statement in the specification or to a statement made by an applicant during prosecution that demonstrates the well-understood, routine, conventional nature of the additional element(s). . . .
2. A citation to one or more of the court decisions discussed in MPEP § 2106.05(d)(II) as noting the well-understood, routine, conventional nature of the additional element(s).
3. A citation to a publication that demonstrates the well-understood, routine, conventional nature of the additional element(s). . . .
4. A statement that the examiner is taking official notice of the well-understood, routine, conventional nature of the additional element(s). . . .

Berkheimer Memorandum at 3–4. But the Examiner has not provided any of the four categories of information required by the *Berkheimer*

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Memorandum. Rather, the Examiner merely provides conclusory and high-level general statements (Final Act. 3–5; Ans. 2–6), which are insufficient for meeting the requirements set forth in *Berkheimer*. See *Berkheimer* 881 F.3d 1369–1370. We additionally note the Examiner’s Answer was mailed on March 22, 2018, over a month after the February 8, 2018 *Berkheimer* decision.

Because the Examiner erred with respect to Step 2B of the Guidance and *Berkheimer* requirements, we are constrained on this record to reverse the Examiner’s rejection of independent claim 1, and corresponding dependent claims 2–6 on procedural grounds.

DECISION

We reverse the Examiner’s decision rejecting claims 1–6 under 35 U.S.C. § 101.

REVERSED